THE FARMERS' CABINET,

AND

AMERICAN HERD-BOOK.

DEVOTED TO

AGRICULTURE, HORTICULTURE, AND RURAL AND DOMESTIC AFFAIRS.

Perfect Agriculture is the foundation of all trade and industry.—LIEBIG.

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For the Farmers' Cabinet.

Fruit Trees.

THE very superior apples which are grown in the State of Ohio, have attracted the attention of those who have had an opportunity of examining them; they are said to be finer and fairer, and are produced in greater abundance than those of similar kinds in the Atlantic States. The orchards are also said to possess a much more *youthful* appearance than those in the Atlantic States, where the trees have not been longer transplanted. Some have supposed that their superiority arose from soil and climate, but it would be well to consider whether the difference does not arise from their much more recent derivation from seedlings. The early settlers in the West, carried with them seeds of various kinds, and amongst them apple seeds of the most esteemed varieties; these were planted, and produced numerous seedling varieties, more or less differing in character from those they were taken from, as is generally the case, in consequence of the mixture of the pollen of different kinds, during the period of flowering. Those of a very superior character, have been extended and propagated, by grafting, so as to furnish the fine fruit which is extensively cultivated in the West, and the inferior sorts suffered to run out and decay. The celebrated horticulturist, T. A. Knight, reasoning from the fact, that many fine varieties of the apple have greatly degenerated or disappeared, thinks he is justified in the conclusion, that "all plants of one species, however propagated from the same stock, partake, in some degree, of the same life, and will attend the progress of that life in the habits of its youth, its maturity, and its decay; though they will not be any way affected by any accidental injury the parent tree may sustain after they are detached from it." If this theory be sound, and there seems to be but little difficulty in reconciling it with our observations on the gradual disappearance and decline of some of our most esteemed varieties of fruits; it would be well to resort to more recent seedling varieties of valuable sorts, to renovate our orchards.

The age of an apple tree should be dated from the period of planting the seed, and not from the time of inserting the graft or applying the bud to the stock. Knight supposed the age of the apple tree to be about two hundred years, and of course those esteemed varieties which were introduced into this country by the early settlers, and which were probably not then young varieties, may be expected to disappear rapidly. Hence

the importance of introducing valuable seedlings from the West, where, it is understood, any quantity can be obtained on reasonable terms, or instead of the young grafted trees, the grafts of the best sorts, may be brought eastward, and inserted by our farmers or nurserymen. It is to be hoped that the coming season, the Western nurserymen will forward either the trees or grafts, to a market in the Atlantic States.

The quince tree is much shorter lived than the apple, and the most common mode of raising it is from suckers; the consequence is, that we are constantly growing old trees that produce imperfect fruit, and that in small quantities; when, by raising them from the seed, young and vigorous trees would be produced, that would repay us with abundance of fine, fair fruit. The quince from the seed, will produce fruit in five or six years.

It would be well to consider whether budding of peach trees of the same variety, for twenty or thirty years, without resort to seedlings produced from the stones, may not be the cause of some of the infirmities of that most valuable fruit. It is questionable whether the extreme length of life of a peach tree is more than thirty or forty years, if so, the system of budding without resort to seedlings, should not be extended over more than half that period.

The foregoing suggestions have been thrown out with the view of inducing some of our able and experienced cultivators of fruit trees to take the field, and give us through the pages of the Farmers' Cabinet, the result of their observation and experience on this very interesting subject.

There is a spirit abroad, on the subject of increasing the quantity of good fruit, both for domestic consumption and for sale in the market; and the correspondents of the Cabinet, who will furnish essays of a practical character, calculated to instruct its numerous readers on this interesting subject, will deserve the thanks of the public. Poma.

N. B. It would be well for the Ohio nurserymen, where they have certain knowledge of valuable sorts of apples being derived from seedlings in the West, to give them the name of "Ohio seedling bell-flower," &c.; so as to preserve the origin of the most esteemed Western seedlings.

Let no man be ashamed to work. Let no man be ashamed of a hard fist or a sunburnt countenance. Let him be ashamed only of ignorance and sloth. Let no man be ashamed of poverty. Let him only be ashamed of idleness and dishonesty.

Durham Cattle.

Editor of the Cabinet,—Sir: being desirous to obtain for my farm a superior breed of cattle, expressly for milk, butter, and beef, I have, for some time past, been considering which is the best for that purpose; and from what I have heard, together with what little I know concerning the imported breeds of cattle, I have at length come to the conclusion, that the Durham Short-horns are preferable for those two qualities; but being yet too inexperienced in the different varieties and breeds of Short-horn cattle, to depend solely upon my own judgment for a choice, I have deemed it prudent, before purchasing, to ask of you the following information: As I have heard the Short-horns called by the various appellations of the Old Improved Durham Short-horns; Puse Improved Durham Short-horns; Alloy breed; Teeswater breed; my wish is to know, first; from what breeds the pure Improved Durham Short-horns came: second; whence came the Alloy breed: third; whether the Teeswater is the same as the Old Unimproved Durham Short-horns, or as belonging to the Yorkshire breed of Short-horns: and fourthly; which breed of Short-horns is to be preferred. It is classing these four breeds, all under the name of Durham cattle, by crosses, &c., that puzzles me. I beg pardon for the freedom I have used, but knowing your willingness at all times, to give your readers any information in the agricultural line, I am glad to apply to the columns of your valuable paper for it.

A Constant Subscriber.

At a meeting of the Board of Agriculture of the American Institute, held at the Repository, Wednesday, 26th of April, 1843; "A standing committee of four, was appointed on milk, with power to pursue measures to prevent impostures in watering, &c., and to report to the Board the means of deception resorted to, and other facts and statistics worthy of their attention. A skilful artist belonging to the Institute, has been consulted, who is confident that an instrument may be made, that will at once, by being immersed, indicate the quantity of water, so that a child can understand it. It is demonstrable if the specific gravity of water is 3¼ per cent. less than milk, as laid down by the best authority—that such an instrument can be made and afforded for a trifle. It was stated by a member at the meeting of the Institute, formerly resident in London, that they were in use in that city, and answered the purpose sought."—*U. S. Farmer.*

Product of Dairy Cows.

EDITORS CULTIVATOR,—I notice in the last number of your paper, a proposition of Mr. Sotham, at Hereford Hall, to ascertain the product, for the current year, of his dairy of Hereford cows, for the benefit of the public. I entertain the opinion, that it is only by pursuing this course, that the public can ever become enlightened on this subject. We have had theories and opinions, unsubstantiated by facts, in abundance; we now call for *proof* of these theories, and it can only be furnished by experiments of this character. The isolated cases which have been exhibited as tests of superior milking qualities in some of the improved breeds of cows, in my judgment prove nothing. Similar examples can be shown respecting any breed. It is not enough that a single cow, for a single week, yields a large product, upon high keeping. Place, with 10 or 20 others of the same kind, this cow, and keep them in the same manner that the native cows of the ordinary dairy farmer are kept; weigh and measure the products for the period of a year; and if they possess superior properties, it will by this process be made evident. I should be happy if some gentleman who has a dairy of Short-horns, will pursue this course and give the result. If there is such an one, I wish to state, for his encouragement, that from my dairy of 12 cows, not one of which possesses a drop of royal blood,—for the current year, commencing 1st of March, 1842, I made 6,403 lbs. of cheese and butter, or about 533½ lbs. per head—the cheese weighed when cured and sold. There is no *estimate* here; it is the *actual weight.* The feed of the cows was grass and hay alone, no meal or roots being used. Mr. Sotham is going ahead on the right principle: success to him. In this way we shall become possessed of the truth, which in these days of humbug and moonshine, is a great desideratum.

Respectfully yours, JAS. T. NORTON.

Goshen, Conn., April 17th, 1843.

GENTLE MEANS THE BEST.—The best tamer of colts that was ever known in Massachusetts, never allowed whip or spur to be used; and the horses he trained never needed the whip. Their spirits were unbroken by severity, and they obeyed the slightest impulse of the voice or rein, with the most animated promptitude. He said it was with horses as with children—if *accustomed* to beating, they would not obey without it. But if managed with untiring gentleness, united with consistent and very equable firmness, the victory once gained over them was complete.

Breaking Steers.

A FARMER who had exchanged oxen with another, found that he had come into possession of a pair of real *cut and run* fellows; a pair that were not slow neither, nor very particular as to the time or occasion of showing their speed to their new proprietor.

Being in the woods one day, and just ready to hitch on to a log, they started for home, and he after them in pursuit. The oxen having many *feet* the start of him, and more *feet* to apply as locomotives, soon won the race, and wouldn't heave-to till the barn-yard brought them up. The owner said nothing to them when he arrived, but supplied himself with an extra number of chains, and drove them quietly down again to the woods. He then put all the chains he had together, put one end round a tree and backing the oxen up, hooked them on—and then turned away to other business. In a few minutes the oxen started again, and being elated with their former success, started with more steam than at first; little thinking that they were moored by a chain cable. They had made but a leap or two, and began almost to shout for victory, when—crack O! they came to a dead stand, and their necks were almost broken by the suddenness of the check. The farmer then moved them to another tree, fastened one end as before, and coiled the slack of the chain at the roots.

As soon as the pain was a little over they thought they would try a new gallopade.—Hardly had they got a fair start when the chain began to straighten, and they were brought up again "all standing." This was too much for even the "patience of an ox," and one of them "roared right out" with pain and vexation, and they probably mentally resolved to reform their habits, for they never tried to run away again.—*Maine Farmer.*

BEES.—To prevent bees from going off upon swarming, take the precaution, when they exhibit a disposition to swarm, to stop most of the holes by which they leave the hive, so as to force the swarm to be a good while coming out. The swarm is commonly made up of the young bees, many of whom can scarcely fly; and as nothing can be done by the swarm till all are out of the hive, but fly about in the air; by prolonging the time of their coming out, the feeble ones get tired, and their plans so frustrated, that it is necessary for them to alight for rest, and to re-arrange for their journey. If the swarm be able to leave the old hive all at once, they care but little about alighting.—*Prairie Farmer.*

From the Michigan Farmer.

Making Soap.

Among other things, let me tell you to learn how to make soap. I do not know that I should have thought of naming this, if my ignorance of soap making had not troubled me exceedingly. At first I did not know the method, and depended on the old woman who lived with me, to make it. I went to her when the soap-keg was almost empty, and told her we must have some made as quick as possible. "Why, law! Miss, now don't you see it ain't the right time of the moon?" I tried to persuade her that soap making and the moon were but very slightly connected, if the other part of the business was well conducted. It was, however, to no purpose—I had to wait till the "right time" came round, before I could get my soap. After this, when I had the superintendence of a large family, I was obliged to buy it by the barrel, because I did not well understand the manufacture of the article, and I was really ashamed that such extra expense was caused by my ignorance. Sometimes there was too much lime with the ashes; then again not enough: sometimes it was too greasy, and sometimes any thing but what it ought to be. I tell you my experience in the matter, so that you may learn from your mothers *now*, and not have the trouble of *learning*, when you ought to be making it. As I have given you so long a talk on the subject, I will add a recipe I found in the Cultivator. It may be of use to some of your mothers, if not to you. Mr. Tomlinson writing to Judge Buel, says: "My wife has no trouble about soap. The grease is put into a cask, and strong lye added. During the year, as the fat increases, more lye is stirred in, and all occasionally stirred with a stick that is kept in it. By the time the cask is full, the soap is made ready for use. It is made hard by boiling and adding a quart of fine salt to three gallons of soap. It is put into a tub to cool, and the froth scraped off. It is afterwards melted to a boiling heat, and a little rosin or turpentine given, which improves the quality."

Some of you will think me a most unsentimental sort of a woman, when I advise you to learn how good bread, butter, coffee, pickles, puddings, &c., are made; but you will have to learn sometime, or do worse. Work with your own hands too, even if it should tarnish their whiteness a little. A man does not consider the beauty of a soft white hand a very strong recommendation, when he finds it has been kept for show and not for use. I think a young lady should be able to scour a kettle and grace a diamond. Lucy.

Wholesome Truths.

Keep it before yourself, young man, that industry and good morals will be a passport for you in good society; and will make you respected and esteemed by the good and wise.

Keep it before yourself, young lady, that kindness of heart, a sweet disposition and an even temper, will make you an agreeable companion with the old and the young.

Keep it before yourself, young man or woman, that in a choice for a partner for life, you should look well to the habits and disposition of each other. That a young man with a cigar in his mouth, and cane in his hand, and his brains running to hair, may do very well for a beau, but is not to be compared to the plain, unpretending youth, whose heart is right, and whose common sense will not allow him to play the dandy.

That young lady who is all accomplishments, who can sing a little, dance a little, thumb the piano a little, and look fascinating any time, may fill a place on the sofa, and be the belle of a ball room, yet if she cannot boil a pudding, roast a steak, dust a room, or darn a stocking—if her accomplishments are all for show and none for use, then ten chances to one, that the young lady who has got a knowledge of household affairs, who has been brought up by a careful mother, and is well learned in the actual duties of life, will make a better wife, and a pleasanter and a happier home.

Keep it before yourself, farmer, that you should return to the earth at least as much as you take from it—that you should make your land richer each year, nor let it wear out—that you should have a neat house, large barns, good sheds for your cattle, and show that it is your ambition to make "two spears of grass grow where one grew before."

Keep it before yourself, merchant, that a "nimble sixpence is better than a slow shilling;" that one price for goods or dealing with every person alike, is the right way to give general satisfaction; and that to secure customers and trade, you must advertise freely.

Keep it before yourself, mechanic, that punctuality is a virtue—that work promised, should always be done at the time, and well done—and then you need give yourself no fears of a want of business.—*Exchange paper.*

A princely mind will ruin a private fortune—keep the rank in which Providence hath placed you; and do not make yourself unhappy, because you cannot afford whatever a wild fancy might suggest.

For the Farmers' Cabinet.

King William Agricultural Society.

Dr. Braxton, in his Address before the "King William Working Agricultural Society," Va., says he can bear ample testimony to the good effects of calcareous manures, that is, of marl, lime, and green-sand; of which, he gives the preference to the eocene, or green-sand formations, although he acknowledges himself unable to account for the superiority of its effects. "I cannot," says he, "say whether the enriching principle is in the green-sand, *per se*, or in something connected with the deposit. Chemists tell us that it is the silicate of iron and potash, but geology is obscure as to the origin of its formation—whether it is a purely mineral, animal or vegetable substance, or whether it is a vegeto-animal substance, or whether it is a triple compound, we cannot tell. The whole subject is wrapped in obscurity, and we must wait patiently upon science for a development of its formation." He says further, that in all judicious systems of husbandry, the first step should be to establish a good rotation of crops. Different soils and different situations, of course, require very different rotations. He would, however, lay it down as "a safe rule, that no land ought to be put in grain cultivation more than half its time, that is, more than one grain crop should not be taken from land in two years, or two in four, or three in six years; and wheat should never follow corn; corn follows wheat very well, and oats succeed corn pretty well. But I would say, let clover follow corn without any grain crop whatever, as I believe the notion that it was necessary to have small grain to shade the young clover, is now pretty well exploded; as every observant farmer must have noticed, that wherever the fly had destroyed his wheat, the clover was much better than where it had been shaded and protected, as they call it, by a luxuriant growth of wheat; and that when the wheat was very luxuriant, the clover was generally killed." He speaks highly of the increased attention paid to the cultivation of artificial grasses, and particularly, to that king of the tribe, red clover; of which he thinks there is now sown in King William's county, a bushel of seed for every ounce that was sown but ten years ago! But still he notes it as among their faults, to have too great a surface in grain, and too little in grass. "All agricultural histories," says the Dr., "both ancient and modern, prove that in proportion as that branch of husbandry has been attended to, that district of country has improved, and the proprietors have become independent, prosperous and happy." On the subject of manures too, he believes they are greatly deficient: they do not make as much as they ought, and might; and what they do make, they do not use to the best advantage. His "own experience goes directly in favour of top-dressing the year previous to the field coming in cultivation, whether of wheat or corn. But as a most judicious farmer says, put it on in any, and every way you can, it will all do good."

The Address from which the above extracts are made, I find in the March number of the Farmer's Register. I have been interested myself in looking over it, and concluded if this notice shall be deemed worth its room in the Cabinet, it might serve to stir up the farmers in this region, as well as in the *Old Dominion*.

One thing more, and I am done. The Dr. sets red clover down as the most valuable of all grasses. One good coat of that, "I think is fully equal, if not superior, to any dressing of putrescent manure we can give our lands." He exhorts his brother farmers to meet every returning season with an increased energy and zeal in the good cause; and reminds them of the good old proverb, that "he who withholdeth not his hand from the plough, shall not want bread." He holds up the cheering hope, that by patient and persevering industry, and labour judiciously directed, we shall experience the best results—"certainly the doubling and tripling of the productiveness of our farms."

Z. Y.

Professor Liebig, the popular writer upon Agricultural Chemistry, when in England, was in Yorkshire, attending agricultural meetings, and is said to have displayed every disposition, to communicate information to all who asked it. He is quite a young man—32—and has done more than any other person now living, to "make two blades of grass grow where only one grew before." Sir Humphrey Davy, before Liebig was born, lectured on Agricultural Chemistry. But the German has reduced to a practical system, what was not much more than a theory with Davy. At Edinburg and Aberdeen, there are now established University Professorships of Agriculture, as well as at Oxford and Cambridge. This shows how completely the public are aware of the importance of cultivating agriculture as a science. Captain Barclay has made a fortune by attending to the changes of crops and breeding of stock. Let others take the hint and do likewise.

Milk and Rail-roads.

There is scarcely an article that can be named, so essential to the health and comfort of families as milk, and it is believed there is no one in which more gross impositions have, in many cases, been practised on the consumer. The account given by Mr. Colman, of the milk used in New-York, cannot be pronounced an exaggeration; and we know no good reason why that account should be applicable to that city alone. But a brighter day is dawning on the dwellers in cities, so far as milk is concerned; and the venders of swill slop, cold water, and artificial milks, are finding their occupations seriously endangered. This is being brought about in a great degree, by the influence of rail-roads, which, spreading a net-work over the country, and centering in the cities, bring the farmer or dairyman, residing 50 miles from the city, within a few hours ride, and enable him to offer his products in the best possible condition for competition. This effect was first extensively felt in Boston, in the reduction of the price and bettering the quality of milk, though that city had never been condemned to use such scandalous stuff as was sold in some other places for milk. At the present time, a large portion of the milk used in that city is received by the rail-road from country dairies. The same beneficial results are beginning to be felt in New York, much to the annoyance, as we gather from the newspapers, of the amateurs of artificial milk in the metropolis. By the New York and Erie rail-road, the milk of the cows fed on the sweet pastures of Orange, and the rich dairies of Ulster, are brought within four or five hours of New York, and the milk business is becoming extensive and profitable. As was expected, a spirit of rivalry has been called out among the old milk-men against their new competitors, and some insinuated that the Orange milk could not be kept sweet so long, unless some deleterious chemical preparation was added. The following account given by an Orange county farmer, of the manner in which their milk is sent to market, satisfactorily accounts for its keeping so well, since pure milk, quickly cooled and kept at a low temperature, will be sweet for a long time, even in warm weather.

The cows are milked early in the morning at Goshen and its vicinity, the milk put into cans containing from 60 to 75 quarts, into which a tin tube filled with ice is inserted, and stirred until the animal heat is expelled from the milk. It is then sent by the rail-road, and arrives, a distance of 80 miles, at the milk depots, which are numerous in the city, in four and a half hours. The tube filled with ice is again inserted, and the milk thus kept cool and sweet until sold. It can be afforded to the public at four cents per quart, of which the farmer gets two cents per quart, and is well satisfied, as it yields more than butter at 25 cents per pound.

When we recollect the vast influence which this method of supplying milk to cities has on their health and expenditures, and the advantages it affords farmers of an easy and profitable mode of disposing of this part of their produce, the mutual benefits of quick and certain modes of communication between the city and country, become strikingly apparent.—*Cultivator.*

For the Farmers' Cabinet.

Potatoes.—The mercer potato seems to have become more and more defective of latter years; is this owing to its becoming aged and of a broken down constitution, or from some other unexplained cause? Would it not be well to search after some other variety possessing good qualities and a sound constitution, to substitute for it?

The foxite is a sound, good potato, which possesses very desirable qualities, and is preferred by many to the mercer.

The forty-fold, which was introduced a few years since from Europe, by Robert Buist, a celebrated gardener, of Philadelphia, certainly has no superior in quality, and it is very productive; it has a light red skin, is of medium size, and good shape. It is white and mealy when boiled, and has a delightful taste. Its cultivation is not yet widely extended, but where it has been tried, it maintains its ground against all others.

J. Cowperthwait, on the Delaware, ten miles above Philadelphia, raised a large crop of them last season, from whom they were obtained for family use, and for planting last season, when they were distributed to three persons in different sections of country, and they succeeded admirably. A. B.

Rules worth being observed by farmers.—1. Perform every operation in the proper season. 2. Perform every operation in the best manner. 3. Always keep your implements and tools in the best order. 4. Finish one job before you begin another. 5. After finishing a job always return your tools to their proper places. 6. Don't put in a crop too large to cultivate well. 7. Personally attend to every operation, and see that it be effectually done.—*Baltimore Farmer.*

From the Massachusetts Ploughman.

Blight-beetle.

Cambridge, June 1st, 1843.

Wm. Buckminster, Esq.,—Dear sir: The insects contained in the branch of the apple-tree, which you submitted to my examination, are the same as those which produce the sudden withering of the leaves and the death of the limbs of the pear-tree, an affection commonly called fire-blight. The discovery of the blight-beetle in the limbs of the apple-tree, is a new fact in natural history, but it is easily accounted for, because this tree belongs not only to the same natural group, but also to the same genus as the pear-tree: it is not, therefore, surprising that both the pear and the apple-tree should, occasionally, be attacked by the same insects.

The piece of the apple-tree branch now before me, measures twenty-eight inches in length, and is three-quarters of an inch in diameter at the lower end. Its surface bore the marks of twenty buds, thirteen of which were perforated by the insects above named; and from the burrows, I took twelve of the blight-beetles in a living state, the thirteenth having previously been cut out. This goes far towards confirming my remarks on these insects, published in the fifth volume of the "New England Farmer," page 171, where you will find the following statement: "A whole limb may swarm with them; every bud may conceal the place of their operations, without exciting a suspicion of their presence." For their history, I might have referred you to the various published communications of Mr. Lowell and Professor Peck, who have described the agency of these insects in producing the "disease in pear-trees," or, to my own remarks on the same subject, in the "N. E. Farmer," and in the "Treatise on Insects injurious to Vegetation," a book that has been more praised than read; but experience has taught me that line upon line and precept upon precept, are needed to keep the attention of the public directed to the depredations of insects. Allow me, therefore, to extract for you, the following passages from the last named work.

"The grub or larva of the insect, eats its way inward through the alburnum or sap-wood, into the hardest part of the wood, beginning at the root of a bud, behind which probably the egg was deposited, following the course of the eye of the bud towards the pith, around which it passes, and part of which it also consumes; thus forming, after penetrating through the alburnum, a circular burrow or passage in the heart-wood, contiguous to the pith which it surrounds. By this means the central vessels, or those which convey the ascending sap, are divided, and the circulation is cut off. This takes place when the increasing heat of the atmosphere, producing a greater transpiration from the leaves, renders a large and continued flow of sap necessary to supply the evaporation. For the want of this, or from some other unexplained cause, the whole of the limb above the seat of the insect's operations, suddenly withers and perishes, during the intense heat of midsummer. The larva is changed to a pupa, and subsequently to a little beetle in the bottom of its burrow; makes its escape from the tree in the latter part of June, or beginning of July, and probably deposits its eggs before August has passed. This little beetle is only one-tenth of an inch in length; it is of a deep brown colour, with the antennæ and legs rather paler, or of the colour of iron-rust. The thorax is short, very convex, rounded and rough before; the wing covers are minutely punctured in rows, and slope off very suddenly and obliquely behind; the shanks are widened and flattened towards the end, beset with a few little teeth externally, and end with a short hook; and the joints of the feet are slender and entire."

"The minuteness of the insect, the difficulty attending the discovery of the precise seat of its operations before it has left the tree, and the small size of the aperture through which it makes its escape from the limb, are probably the reasons why it has eluded the researches of those persons who disbelieve in its existence as the cause of the blasting of the limbs of the pear-tree. It is to be sought for at or near the lowest part of the diseased limbs, and in the immediate vicinity of the buds situated about that part."

"The remedy suggested by Mr. Lowell and Professor Peck, to prevent other limbs and trees from being subsequently attacked in the same way, consists in cutting off the blasted limb *below* the seat of injury, and *burning it before the perfect insect has made its escape.* It will therefore be necessary, carefully to examine our pear-trees daily, during the month of June, and watch for the first indication of disease, or the remedy may be applied too late to prevent the dispersion of the insects among other trees."

We are now to look for the disease and its cause in the apple, as well as in the pear-tree, and should not delay to cut off and burn the infected limbs, as soon as the leaves begin to wither.

Yours respectfully,

T. W. Harris.

Canada Thistle in Newcastle County, Delaware.

To the farmers of Newcastle county,—

Gentlemen,—The members of the Agricultural Society of Newcastle county, have ascertained, *beyond doubt*, that the *Canada thistle*, the *most pestiferous* of all thistles or noxious weeds, which infest land and destroy the hopes of the husbandman, has appeared, and now flourishes in a small way, in this county, upon lands seeded by a cargo of timothy seed, imported from the western part of New York; and that its *extirpation* is immediately and loudly called for by every lover of the soil and true friend of agriculture. Before this noxious thistle *seeds*, I hope to lay before you *the best mode* of its extermination, drawn from the most authentic sources and regions where it flourishes in the United States, where it has made its appearance. Suffice it to say, that it is spreading within our own bailiwick, Newcastle county, and can be seen growing in Brandywine, Christiana and Newcastle hundreds of this county, and *must be extirpated root and branch*, or else all your valuable labour, seeds, lime and manure, will be lost; —the value of your lands depreciate—the fields that now give you bread, yield you worse than stones, and your meadows and grazing grounds, instead of yielding you hay and beef, milk and butter, will soon be overrun by this *foreign pest*—and you and yours be speedily driven from your homesteads, and your cattle on a "thousand hills," be suffered to perish and die for lack of their accustomed food.

To enable you all *practically* to know and distinguish this "thistle" from all others of the family of thistles, I shall cause specimens of the *Canada thistle* to be left daily at the seed store of Mr. George Reynolds, Market street, Wilmington, and at the printing offices of the Delaware Journal, Delaware Gazette and Delaware Republican, for the next ten days, earnestly recommending on behalf of the Agricultural Society and Farmer's Club of this county, its speedy *extermination* wherever found, until a more full and detailed method, now being sought after by the Society, is published. We recommend, where the thistles are found few and scattered, *digging them up by the root and covering the place thickly with lime or salt;* where thick and embedded, to mow them close and saturate the earth with unadulterated salt-ley from the soap houses, or with a thick covering of coarse salt or lime. But by all means, and by all exertions, never to suffer another *Canada thistle* to bloom or ripen its seed, for vegetation in our faithful and valuable soils of this county or state.

Signed,
James W. Thomson,
Pres't Ag. Society N. C. C.

For the Farmers' Cabinet.

To make good Coffee.

First, procure the best coffee in the market; wash it very clean, and roast it to the colour of a golden brown, but not a deeper shade by any means. Then take the whites of three eggs to each pound of coffee, mix very carefully with the coffee while warm, and immediately transfer to earthen vessels, tying them over with bladders to render them air-tight Take from these vessels sufficient coffee for one making only at a time; grind it, place it in a fine muslin bag, suspend it about mid-way in the pot, turn on the boiling water, and put on the cover, to prevent the escape of steam. By this mode the coffee will be very strong, but it is best to reduce it by the addition of boiling-hot milk, when it will form a most delicious beverage, very different indeed, from that which is produced by boiling the ground coffee in water. And to be convinced of the fact, that by the above method, which is simply *infusion*, all the virtues of the coffee may be obtained, it is only to take the dregs left in the bag, and boil them in water for a considerable time; the result will be, a black, bitter, nauseous, feverish, woody extract, without a trace of the fine flavour of coffee, and answering to the name by which it was known on its first introduction into use, according to the account published in the eighth volume of the "Harleian Miscellany," namely, "the devil's black broth!" The making of tea is by infusion, not *decoction;* who ever thinks of boiling *tea?*

B.

A hen witness.—Two men were lately apprehended in Stamford market, on suspicion of having stolen sixteen hens and nine chickens. Handbills were issued to find the owners; and on Monday, Mr. Peake, of Holme, having had nine chickens stolen, came to Stamford, bringing with him the hen which had reared the brood; she was set down in the room with the other hens and the chickens, and the moment she gave one *chirp*, the whole of the chickens flew to her. Upon this, one of the thieves confessed that the fowls and chickens were stolen on that night. He was fully committed for trial.—*English paper.*

Agricultural mission from the U. States.

THE attendance of our friend H. Colman, at a meeting of the Royal Agricultural Society, three months ago, was noticed in our last number. Whatever has relation to his reception and movements in England, will not fail to be interesting to our readers. We take the following from a late number of the Mark Lane Express. It gives us much pleasure to note the kindly feeling that runs through the article, and trust there is every disposition to reciprocate it in this country.

ED.

"Mr. Henry Colman, of the State of New York, has come to England, at the request of a very large number of the farmers of the United States, to inquire into the farming, and condition of the rural population in England and on the Continent, with a view to ascertain their improvements, and obtain such information in every department of agriculture and horticulture, and rural and domestic economy in general, as may be beneficial to his own country. He is familiar, from long experience, with all the practical operations and details of American husbandry, having been employed by the Government of Massachusetts for several years, as commissioner for the agricultural survey of that most improved State in the Union. His reports have been favourably received in this country. He brings with him numerous letters to gentlemen of the highest consideration in this country and on the Continent; and has likewise diplomas from the American Agricultural Society at Washington; the Pennsylvania Agricultural Society at Philadelphia; the New York State Agricultural Society; the American Institute at New York; the Massachusetts Agricultural Society at Boston; and the farmers of Massachusetts, at a public meeting held at the State-house in Boston; and other societies in the United States, commending him and his objects to the friends of agricultural and rural improvement, wherever they may be found.

"Mr. Colman's objects, we understand, are wholly public and practical, and entirely disconnected with any party or political considerations whatever. He proposes to spend a year or more in England, in visiting, as far as may be, every part of the country—England, Scotland and Ireland—and then to proceed to the Continent, to examine the husbandry of France, Belgium, Germany, Italy, and other places where information may be obtained, and especially to make himself acquainted with the agricultural and manual labour schools and the experimental farms.

"Mr. Colman was, a year ago, elected an honorary member of the Royal Agricultural Society of England, on the motion of the Duke of Richmond, seconded by Lord Spencer.

"We have now before us some of Mr. Colman's reports on the condition of agriculture in certain districts of the United States, and which contain a vast body of useful information. They clearly prove the ability of Mr. Colman to perform the task he has undertaken, and we trust every facility for obtaining information will be afforded him by our agriculturists—if for no other cause, for the selfish one that we believe the reports which he will publish of the agriculture of Great Britain, will be as useful to the British farmer as they will be valuable to the farmers of his own country."

From the Friend.

Martins.

A PERSON in New Jersey had a pigeon-box on the top of an out-house, in one of the apartments of which a pigeon was sitting. This place was visited by a number of martins, apparently with the intention of locating themselves there for the season; but finding it pre-occupied, they raised a great clamour and outcry, hoping to frighten the pigeon away; but with the usual attachment of a female bird for her eggs, she kept possession. Not succeeding in thus driving her off, they had recourse to more vigorous measures, and commenced an assault on her with their wings and beaks; but even this could not overcome her "mother's love;" and shrinking into her nest, she meekly endured their insults, refusing to forsake her charge.

The martins were evidently foiled, and after renewed and ineffectual efforts, desisted from the attack, and settled on the roof, apparently to hold a council on this unexpected state of affairs. After much chattering among themselves, they simultaneously flew to the barn-yard, where they collected sticks, mud, &c., and began with great zeal to build up the entrance to the pigeon's nest, so that in less than an hour they had it completely barricaded, and the poor pigeon a prisoner. They then flew round with clamorous exultation at their successful and malicious mischief, for about half an hour, and then took their departure never to return. The spectator sympathizing with the imprisoned bird, destroyed the work of the martins, and released the prisoner. W.

THE oftener carpets are shaken, the longer they last, as the particles of sand which collect upon them grind the threads. Sweeping them also wears them.

For the Farmers' Cabinet.

The Blackberry Culture.

WE sometimes hear farmers inquiring for new articles to throw into the market:—the products of the old routine, say they, are overdone;—they need something a little out of the common line;—they want a new crop. I could not help thinking of these wants, quite amusingly to myself yesterday, when I got out of the car, and found I had been riding with eight bushel-baskets of dewberries, which were now placed on board the boat to cross the Delaware for our market. On speaking with the woman who had them in charge, she informed me she had sent six baskets to market, the day but one before, and expected to send fifty more this season. She gets from $2 to $2 50 a basket; and I find they retail from 10 to 12½ cents a quart. She has a field of about 10 acres to go over:—the owner gives her one half for picking, and then allows her 12½ cents in the dollar, for selling his half. A hand can gather from one and a half to two baskets a day, so that it will probably be quite as profitable an enterprise to her, as washing and ironing would be: and some of the juvenile readers of the Cabinet may calculate, if they choose, whether the owner of the land, if he gets 30 baskets for his share, at $2 a basket, may not pay the picker $10 for marketing them, and still have quite as much rent for his land, as if he had raised 20 bushels of oats to the acre, worth 40 cents a bushel. Now it seems to me, $5 an acre, clear, give a pretty good rent for an old briar field, the fee-simple of which, I suppose would hardly be valued at $20 per acre. The crop, I judge, would not very soon be *rooted out* by *clover* or *timothy*, and would need no manure.

I shall not tell the readers of the Cabinet where this *new* agricultural product comes from, nor the name of the *grower*, lest, if he should chance to be one of themselves, he should be vexed with me for publishing his *secret*, and putting them upon his track. Success to the *dewberry culture!*

A PHILADELPHIAN.

Seventh mo. 13th, 1843.

Glass.

"IT might dispose us to a kinder regard for the labours of one another, if we were to consider from what unpromising beginnings the most useful productions of art have probably arisen. Who, when he first saw the sand or ashes, by a casual intenseness of heat, melted into a metalline form, rugged with excrescences and clouded with impurities, would have imagined that in this shapeless lump lay concealed so many conveniences of life, as would, in time, constitute a great part of the happiness of the world? Yet, by some such fortuitous liquefaction was mankind taught to procure a body, at once, in a high degree, solid and transparent; which might admit the light of the sun, and exclude the violence of the wind; which might extend the sight of the philosopher to new ranges of existence, and charm him, at one time, with the unbounded extent of material creation, and at another, with the endless subordination of animal life; and what is of yet more importance, might supply the decays of nature, and succour old age with subsidiary sight. Thus was the first artificer in glass employed, though without his knowledge or expectation. He was facilitating and prolonging the enjoyment of light, enlarging the avenues of science, and conferring the highest and most lasting pleasures: he was enabling the student to contemplate nature, and the beauty to behold herself."

A century has nearly elapsed since Dr. Johnson wrote this forcible and beautiful paragraph; and nothing has occurred, in the subsequent history of manufactures, to lessen its truth or beauty.

CUTTING POTATOES.—Some farmers still strenuously contend that slips are as valuable to plant or propagate from as whole potatoes; but our experience has produced in our mind a conviction that they are not. It is nevertheless true, that where one is short of seed, or when the difficulty of procuring a sufficiency is great, or where one has a new variety, which he is desirous of "making go" as far as possible, cutting may be expedient, because it is prompted by necessity. But if a farmer has plenty of potatoes, whole ones, of a medium size, should be used for seed. This, we think, should be the standing rule. No one selects his smallest ears of corn for seed. Why, then, should we not adopt the same principle in selecting seed potatoes? As to cuttings, or "seed-ends," as they are generally denominated by farmers, they are not, in our opinion, worth planting, when whole potatoes can be obtained at the usual price. It has been asserted that, by following this process, the best and most valuable variety, may be wholly "run out" in the course of a few years. It is a good principle always to select the best for seed; propagate from your finest specimens, whether animal or vegetable, and preserve the rest for use or sale.—*Maine Cultivator.*

Instinct of Birds.

One of the most remarkable cases of instinctive knowledge in birds, was often related by my grandfather, who witnessed the fact with his own eyes. He was attracted to the door, one summer day, by a troubled twittering, indicating distress and terror. A bird, who had built her nest in a tree near the door, was flying back and forth with the utmost speed, uttering wailing cries as she went. He was at first at a loss to account for her strange movements; but they were soon explained, by the sight of a snake, slowly winding up the tree.

Animal magnetism was then unheard of; and whosoever had dared to mention it, would doubtless have been hung on Witch's hill, without benefit of clergy. Nevertheless, marvellous and altogether unaccountable stories have been told of the snake's power to charm birds. My grandfather having a mind to test the truth of such stories, thought he would watch the progress of things; but, being a humane man, he resolved to kill the snake before he despoiled the nest. The distressed mother, meanwhile, continued her rapid movements and troubled cries; and he soon discovered that she went and came continually, with something in her bill, from one particular tree—a white ash. The snake wound his way up; but the instant his head came near the nest, his folds relaxed, and he fell to the ground rigid, and apparently lifeless. My grandfather made sure of his death, by cutting off his head, and then mounted the tree to examine into the mystery. The snug little nest was filled with eggs, and covered with leaves of the white ash!

That little bird knew, if my readers do not, that contact with the white ash is deadly to a snake. This is no idle superstition; but a veritable fact in natural history. The Indians are aware of it, and twist garlands of white ash leaves about their ancles, as a protection against rattle-snakes.

I have never heard any explanation of the effect produced by the white ash; but I know that settlers in the wilderness, like to have these trees around their log-houses, being convinced that no snake will voluntarily come near them. When touched with the boughs, they are said to grow suddenly rigid, with strong convulsions; after a while they slowly recover, but seem sickly for some time.

The following well-authenticated anecdote has something wonderfully human about it:

A parrot had been caught young, and trained by a Spanish lady, who sold it to an English sea-captain. For a time, the bird seemed sad among the fogs of England, where birds and men all spoke to her in a foreign tongue, By degrees, however, she learned the language, forgot her Spanish phrases, and seemed to feel at home. Years passed on, and found Pretty Poll the pet of the captain's family. At last, her brilliant feathers began to turn grey with age; she could take no food but soft pulp, and had not strength enough to mount her perch. But no one had the heart to kill the old favourite; she was entwined with so many pleasant, household recollections. She had been some time in this feeble condition, when a Spanish gentleman called one day to see her master. It was the first time she had heard the language for many years. It probably brought back to memory the scenes of her youth in that beautiful region of vines and sunshine. She spread forth her wings with a wild scream of joy, rapidly run over the Spanish phrases, which she had not uttered for years, and fell down dead.

There are different theories on the subject of instinct. Some consider it a special revelation to each creature; others believe it is founded on traditions handed down among animals, from generation to generation, and is therefore a matter of education. My own observation, two years ago, tends to confirm the latter theory. Two barn-swallows came into our wood-shed in the spring time. Their busy, earnest twitterings, led me at once to suspect that they were looking out a building spot; but as a carpenter's bench was under the window, and frequent hammering, sawing, and planing were going on, I had little hope they would choose a location under our roof. To my surprise, however, they soon began to build in the crotch of a beam, over the open door-way. I was delighted, and spent more time watching them, than "penny-wise" people would have approved. It was, in fact, a beautiful little drama of domestic love. The mother bird was *so* busy, and *so* important; and her mate was *so* attentive! Never did any newly-married couple take more satisfaction with their first nicely-arranged drawer of baby-clothes, than they did in fashioning their little woven cradle.

The father bird scarcely ever left the side of the nest. There he was, all day long, twittering in tones that were most obviously the out-pourings of love. Sometimes he would bring in a straw, or a hair, to be inwoven in the precious little fabric. One day my attention was arrested by a very unusual twittering, and I saw him circling round with a large, downy feather in his bill. He bent over the unfinished nest, and

offered it to his mate with the most graceful and loving air imaginable; and when she put up her mouth to take it, he poured forth *such* a gush of gladsome sound! It seemed as if pride and affection had swelled his heart, till it was almost too big for his little bosom. The whole transaction was the prettiest piece of fond coquetry, on both sides, that it was ever my good luck to witness.

It was evident that the father bird had formed correct opinions on "the woman question;" for during the process of incubation, he volunteered to perform his share of household duty. Three or four times a day would he, with coaxing twitterings, persuade his patient mate to fly abroad for food; and the moment she left the eggs, he would take the maternal station, and give a loud alarm whenever cat or dog came about the premises. He certainly performed the office with far less ease and grace than she did; it was something in the style of an old bachelor tending a babe; but nevertheless it showed that his heart was kind, and his principles correct, concerning division of labour. When the young ones came forth, he pursued the same equalizing policy, and brought at least half the food for his greedy little family.

But when they became old enough to fly, the veriest misanthrope would have laughed to watch their manœuvres! Such chirping and twittering! Such diving down from the nest, and flying up again! Such wheeling round in circles, talking to the young ones all the while! Such clinging to the sides of the shed with their sharp claws, to show the timid little fledgelings that there was no need of falling!

For three days all this was carried on with increasing activity. It was obviously an infant flying school. But all their talking and fussing was of no avail. The little downy things looked down, and then looked up, and alarmed at the infinity of space, sunk down into the nest again. At length the parents grew impatient, and summoned their neighbours. As I was picking up chips one day, I found my head encircled with a swarm of swallows. They flew up to the nest, and jabbered away to the young ones; they clung to the walls, looking back to tell how the thing was done; they dived, and wheeled, and balanced, and floated, in a manner perfectly beautiful to behold.

The pupils were evidently much excited. They jumped up on the edge of the nest, and twittered, and shook their feathers, and waved their wings; and then hopped back again, saying, "It's pretty sport, but we can't do it."

Three times the neighbours came in and repeated their graceful lessons. The third time, two of the young birds gave a sudden plunge downward, and then fluttered and hopped, till they lighted on a small upright log. And oh, such praises as were warbled by the whole troup! The air was filled with their joy! Some were flying round, swift as a ray of light; others were perched on the hoe-handle and the teeth of the rake; multitudes clung to the wall, after the fashion of their pretty kind; and two were swinging, in most graceful style, on a pendant hoop. Never, while memory lasts, shall I forget that swallow party! I have frolicked with blessed Nature much and often; but this, above all her gambols, spoke into my inmost heart, like the glad voices of little children! That beautiful family continued to be our playmates, until the falling leaves gave token of approaching winter. For some time, the little ones came home regularly to their nest at night. I was ever on the watch to welcome them, and count that none were missing. A sculptor might have taken a lesson in his art, from those little creatures perched so gracefully on the edge of their clay-built cradle, fast asleep, with heads hidden under their folded wings. Their familiarity was wonderful. If I hung a gown on a nail, I found a little swallow perched on the sleeve. If I took a nap in the afternoon, my waking eyes were greeted by a swallow on the bed-post; in the summer twilight, they flew about the sitting-room in search of flies, and sometimes lighted on chairs and tables. I almost thought they knew how much I loved them. But at last they flew away to more genial skies, with a whole troop of relations and neighbours. It was a deep pain to me, that I should never know them from other swallows, and that they would have no recollection of me.

L. M. Child.

Soda for washing.—We have been requested by a correspondent, to publish the following receipt for washing with sub-carbonate of soda:

To five gallons of water, add a pint and a half of soft soap, and two ounces soda. Put the clothes, after soaking over night, into the mixture at boiling heat, rubbing the parts most soiled with soap. Boil them one hour; drain, rub and rinse them in warm water; after being put into indigo water, they are fit for drying. Half the soap and more than half the labour, are saved by washing in this manner.—*Michigan Farmer.*

The whiteness of ivory handled knives may be restored by rubbing them with fine sand paper, or emery.

From the Ohio State Journal.

Sugar from Maize.

Sir,—When the fact was announced from a source entitled to the fullest confidence, that corn-stalks were quite equal to the cane for the production of sugar, it was natural to suppose that our farmers would immediately avail themselves of so great a discovery, to increase the profits of their labour. But we find that nothing but ocular demonstration will induce people, in such times as the present, to engage in any new enterprise, however feasible or promising of beneficial results. It was with that view I put up a mill last season, for the purpose of making a trial on this subject, and the issue of my experiments proved all that had been before stated to be true, and more, for the fact was established to my satisfaction, that sugar, or at any rate, first-rate molasses, may be made from corn-stalks, after the corn has come sufficiently to maturity to be fed to swine.

I found that corn-stalks contained vastly more saccharine matter, than I had supposed possible. The expressed juice indicated nine degrees of the sacchrometer, and one gallon produced more than one pound of sugar, which is more than is usually made from the cane.

I obtained last season, one hundred and fifty pounds of molasses, but only a small part of it granulated, owing to my letting the ears of corn ripen too fully on the stalk, or to an imperfect method of manufacture, or to both. But that which did not granulate, was an excellent article for family use, of a most delicious flavour, and, as we found by experience, very wholesome.

I have no means of knowing how much sugar can be obtained from a given quantity of ground, but I do know that the product will be abundant, and firmly believe that the time will soon arrive, when this indispensable article of domestic economy will be produced among us, and that, too, by our own hands.

The mill that I used to crush the stalks and extract the juice, was made somewhat like a cider mill,—the rollers are 18 inches in diameter, (two feet would be better,) two inches in length, made of wood and connected together with cogs; the gudgeons at the bottom are made of iron, two inches in diameter.

One horse turns the mill with ease. A wooden mill, that any carpenter can make, will be sufficient for a whole neighbourhood; but when the business is conducted upon a larger scale, iron cylinders would be preferable.

The boiling was done in iron kettles hung over a fire, out of doors, and I found much difficulty in the burning of the syrup on the sides of the kettles, by which a part was decomposed, and became like wax, and this again mixing with the whole mass, undoubtedly tended to prevent chrystalization. Molasses may be made in this way, but for making sugar, suitable boilers should be set in brick work, so that the fire shall only come in contact with the bottom.

The expressed juice of the maize, like that of the cane, is impure when it comes from the mill, as a portion of the solid parts of the stalk necessarily mixes with the liquor in the operation of obtaining it, and these must be separated in order to ensure good results. The object of using lime is to effect that purpose and to neutralize the acid the juice is supposed to contain.

And here I will express an opinion that I have formed in part from observation, and that is, that if the expressed juice is suffered to stand a certain time in a large open vessel, after it comes from the mill, the heavier parts of the feculencies will fall to the bottom, and the lighter will float on the surface, and when the liquor is drawn off, it will be nearly or quite free from impurities. Should this prove to be the case, a great object will be gained with little trouble; the only thing that can prevent success in this mode of treating the liquor, will be the commencement of fermentation—this, I think, will not take place in our climate, at the season we should be making sugar. Towards the latter part of my operations, I adopted the course above-mentioned, with my syrup; what I boiled into syrup one day, I let stand to settle until the next, before being made into sugar. Until I adopted this plan, I did not succeed at all.

As to the method of planting corn for this purpose, I have not much experience. The small patch that I planted last year, was done late, so that it did not come to maturity; but I intend to plant some this year, and have the rows about three feet apart, and drop the corn in drills, from one to two inches apart.

And now, Mr. Editor, I must take the liberty to urge you to call the attention of your readers to this important matter, as planting time is approaching, and there ought to be thousands of acres devoted to this culture this spring.

Yours, &c., S. Baldwin.

Franklin county, April 10th, 1843.

Encourage youth to contend with and overcome difficulties.

Poultry better than Pork or Beef.

In this age of improvement in the production of animal and vegetable food, if there is any good reason why all the science, skill and enterprise of agriculturists, editors, chemists and philosophers, should be applied to the melioration and refinement of one or two classes of animals, to the exclusion of others as good by nature, we should like to know it. The hog and the bullock, dubbed with the English titles of Berkshire, and Durham, seem to walk over the land with a sort of John Bull swagger, that has commanded all attention, and left all their brute brethren in their uncultured native deformity; while those foreign *titled* gentry have, in the eyes of some, become absolute perfectionists. Now, in the language of our declaration of rights, "we hold these truths to be self-evident, that—by their constitution—they are all created equal."

We are aware that the noble Berkshires, by their elaine and stearine, have kindled up a great light in the West, which, we hope, may dispel the black cloud of repudiation that hovers over that region,—and are about to monopolize all the care and labour of the farmers thereabouts; but we can see no reason why the delicate, feathered race, should thereby be debarred from sharing in the benefits and perfectionisms of cross breeding, in-and-in breeding, and all other scientific advancements in the world. The noble and ancient family of Chanticleer, whose clarion note has been the world's time-piece so long, that the memory of man runneth not to the contrary; and has never failed to sound the approach of every rising sun; the bird that saved Old Rome from conflagration, by its warning voice in the dead of night,—shall these lose their old established rank, and give place in man's affections to "*herds of swine*," and the sturdy bulls of Bashan? What are all *their* uncouth grunts and frightful bellowings about the farmer's cottage, compared with the music of the cheerful chirping, chatting, cackling, crowing, gobbling, quacking, squeaking, and squalling, with which his poultry-yard resounds from day to day?

But, to come to more sober matter of fact, we think this branch of the farmer's concern, is deserving of more attention than it has generally received. The profit derived from a well arranged, well managed poultry yard, is greater, in proportion to the investment, than that of any other stock, bees excepted. More attention has been devoted to poultry in the vicinity of Philadelphia, than any other part of our country. The Bucks county poultry has acquired a good degree of celebrity, even in the New York market, where it is sometimes found in abundance. The hens are, however, but moderate layers; but their eggs are large and well flavoured. Yet they are not considered equal to our dung-hill fowl in all respects.

The *Dorking* fowl stands first in the estimation of those who have raised them. They will weigh from five to eight pounds. Their bodies are large, and better proportioned than any others, being long, full, and well-fleshed in the breast. They have short legs, and beautiful plumage, with five, instead of four toes; are good layers, good sitters, and good nurses. Their eggs are large, clear white, and of excellent quality. When caponed, in the English mode, they weigh from ten to twelve pounds. Mr. L. F. Allen, of Buffalo, to whom we are indebted for the Dorking history, has them for sale.

Our object in writing this article at this time, is chiefly to suggest to our agricultural societies the propriety of offering liberal premiums for the best specimens of the various kinds of poultry, at their next annual fairs. We need say nothing in favour of the richness and delicacy of this luxury of the table. Good premiums will soon bring out new species and valuable improvements in this, as in any other branch of agriculture.

A writer in the Maine Cultivator, says his experience tells him, that the best mode of fattening poultry is, to shut them up where they can get no gravel—keep corn by them constantly—give them dough once a day, and skim-milk for drink. Thus they may be fatted in ten days. If kept up longer, they should have some gravel, or they will fall away.—*Farmer's Gazette.*

Cockroaches.—The following method of destroying these detestable intruders, is at once simple and effective:—Procure from the apothecary a small quantity of that odoriferous vegetable, called *poke-root;* boil it in water until the juices are extracted, and mingle the liquor with good molasses; spread the mixture in large platters or soup-plates; place these wherever the cockroaches visit, and the enemy will be found slain by fifties and hundreds, in the following morning. A gentleman to whom we are indebted for this information, states that he slaughtered 575 cockroaches in one night, by the above process, and that the root which had been boiled, being thrown into a closet thickly infested by the enemy, the place was quitted entirely in a few days, great numbers being left dead upon the field.—*Boston Gazette.*

Nantucket Sheep-Shearing.

This ancient festival has been duly observed during the week, by our whole population, as affording an occasion for much simple, but hearty festivity and social happiness. This usage, coeval with the early times of our island, of devoting three or four days in the month of June, to the shearing of the sheep and to social pastimes, affords the only holidays which our people enjoy.

The "four days" began on Monday morning, with a clear sky and charming summer breezes, and by early dawn, the sheep drivers had begun their excursion to the distant part of the island in search of the animals who furnish business for the day. The circle formed by the horsemen on the outskirts of the island, is gradually narrowed by the approach of the drivers of the flock to the centre, and by noon the sheep then gathered, are driven into pens on the borders of the washing pond, and are then selected by their respective owners, washed and set at liberty into an enclosure containing about eleven hundred acres, whence, on the third and fourth days, after the wool has become sufficiently dry, they are taken and disrobed of their fleecy treasures. They are then set at large upon the common, and in a few hours return with unfailing speed and accuracy, to the identical spots whence they were driven.

A walk over the grounds devoted to these labours, brings to view many groups of well dressed people, and happy youthful faces, wearing the smile which on their blooming cheeks, denotes the cheerful heart.

On the roads to the scene of action, and in the thoroughfares of the town, carriages of every capacity and description, from the one-horse Nautucket calash to the four-horse omnibus of the city, close packed with passengers, and hurrying in hot haste to and fro, enliven the usual dullness of our streets, and by the show of life on the exterior of society, create new life within the individual breast.

On the ground, this year, a new feature of interest was the spacious tent erected by the Washington Total Abstinence Society, for the accommodation of the cold water army and others, who might need refreshment within its spacious folds. This tent was one hundred feet long by fifty wide, and thirty high. It displayed the American banner during the "four days," and was the head-quarters of the army of youthful votaries of total abstinence, who on Wednesday afternoon, marched from the Town-hall, according to general orders previously given out, to the shearing grounds.

This procession was one of the most interesting sights of the season. About three hundred children composed the troop, and proceeded, accompanied by a band of music, and displaying appropriate banners, through some of the principal streets of the town. Arrived at the Washingtonian tent, they joined their silver voices in singing several "cold water" songs; and having partaken of some refreshments, and been addressed in some suitable remarks, the procession was reformed, and returned to the town. The escort duties of the day were performed by a corps of citizens on horseback.

And lastly, combining all that was pleasant to the eye and ear, was the Fair held under the patronage of the Ladies' Howard Society, in Washington-hall. This spacious room was decorated with surpassing taste, the tables were stocked with the most attractive wares, and if the visiter was not subdued by the charms of the articles for sale, he was sure to be bewitched by charms which could not be bought. Sparkling eyes, rosy lips, smiling faces, damask cheeks, the melody of sweet voices, &c., &c., made the Ladies' Fair the most elegant and most captivating entertainment of the season.—*Nantucket Inquirer.*

Feeding Horses.

Various opinions are entertained as to the best and most economical mode of feeding horses, and many experiments are on record, that have been instituted to settle the question. The result seems to be, that at the ordinary prices of grain and hay, it is cheaper to keep horses on grain, than on hay, or on hay and grain. There is another important matter to be considered, however, and that is, is feeding entirely with grain, as conducive to the health of the animal, as a mixture of hay and grain? We do not believe it to be; and the general result of the experiments has been to show that it is not. Our own experience too, would lead us to speak decidedly upon this point. We have tried feeding horses upon grain alone, and upon grain and hay, and found the latter the best for the animals. They were not so shrunk up or gaunt, there was more muscle and consequently more weight, and whatever may be thought of this latter quality in a race-horse, where nothing but sinews and bones are required, every farmer knows that the road or farm horse, is worth but little without weight. Feeding horses on grain alone, is like keeping a man on wheat bread solely; he will live for a time, but will

finally sink under the experiment. In this case, the finer the flour the worse for the man. We have never had horses in better condition for labour, than when we have fed them with cut wheat straw, wet up in a tub with Indian corn meal. It is evident there must be some proportion between the bulk and the nutritive power of food, and grain alone gives too much nutritive matter for the bulk. Oats, perhaps, approach nearer the standard than any other grain; but the use of these alone, will in a long run be found unadvisable.

One of the most carefully conducted experiments we have noticed, was the one made by Mr. Brotherton, near Liverpool; and he came to the conclusion that horses cannot be kept in a condition fit for work, if fed on grain alone. For nine years, Mr. Brotherton allowed eight horses three bushels of oats and one of beans, but no hay or chaff. During this period he annually lost more or less horses, which he attributed to the quantity of grain being greater than the stomach could digest. This induced him to adopt feeding hay with his grain, in the following proportion:—To eight horses he allowed one bushel of oats, one bushel of beans, and three bushels of cut hay, straw or clover: and he found them better able to do their work than before, and for several years after adopting the plan, lost but one horse from disease. Farmers, we are confident, have much to learn on the subject of feeding animals, and the health and good condition of the latter will, we doubt not, be found compatible with greater degrees of economy than has generally been practised.—*Cultivator.*

Flour mill in Mississippi.

The person who would have prophesied a few years ago, that in 1843 we should have flour mills and raise our own wheat, would have been considered little short of Parson Miller in wildness. Yet a few days ago, in Vicksburg, we called and examined an extensive and complete mill, built by Messrs. Vannatta and Fulsom, to furnish our citizens with that luxury they have not hitherto known—fresh flour at every period of the year. This mill has been now in operation for some week or so, and has ground quite a quantity of wheat into an article, which to our judgment, as well as that of every one else we have heard express themselves, is superior to anything brought to our markets.

For the benefit of those among us who cultivate wheat, and who may wish to get it ground, we inquired the terms on which the proprietors would conduct their business. They will either purchase wheat at the current market price—now from 50 to 62½ cts. per bushel—or they will grind it for the owners, returning them in flour, a barrel for every six bushels of wheat. They will keep constantly grinding, and will be able at any time, to furnish fresh ground flour in any quantities, at the market price, at the wharfs—now from $4 50 to $5 per barrel. One of the proprietors will start for the upper country in a few days, to lay in a supply of fresh wheat of this year's harvest, and according as he pays for wheat, they can afterwards sell flour. When wheat is from 50 to 60 cents per bushel, they can afford to sell flour at $4 to $4 50 per barrel. The mill is situated on Water street, just above the steam saw-mill, convenient to the depot, as well as to the river; and those who raise wheat, cannot perhaps, do better than to send it here to be ground. We hope the establishment of this mill, may have the effect of still further lessening our imports from abroad, and increasing our home production. Wheat succeeds quite well in our State, when properly managed—our neighbour, Major Peyton, and several others, having now beautiful fields ready for harvesting—and every one with a little labour and on a piece of ground scarcely missed, might easily raise enough for domestic use.

In a few days we shall have a sample of the flour manufactured at Messrs. Vannatta and Fulsom's mill, at our office, where our friends are invited to call and examine it. The proprietors understand the true method of whetting an editor's discrimination, and have promised us a treat of fresh flour.

Since writing the above, Mr. Denson, of Madison, called and left at our office, a bundle of the wheat cultivated by him the present year. It is very fine indeed—seems as heavy as any we ever saw at the North. Mr. Denson assures us, that some parts of his field will turn out at least 40 bushels per acre. He is well acquainted with its cultivation, and not likely to be far deceived.

South Western Farmer.

The Pea Bug.—So well acquainted are most persons with this insect, that it needs no description, but the way it gets into the pea is not generally known. The egg is deposited on the outside of the pod; it is of a yellowish colour, resembling that of the horse bee, though not quite so large; it adheres to the pod opposite to the pea on each side, when it hatches and bores its way through the pod into the pea, where it is transformed into a bug, and remains there until the next spring, when it comes out and flies about, and waits for the pea to grow.—*New Genesee Farmer.*

THE PAULAR MERINO BUCK.

Remarks on Sheep breeding.

By Solomon W. Jewett, Weybridge, Vermont.

To select choice fine wooled bucks and breed from the South-down ewes, would doubtless be the best cross that could be obtained from coarse wooled sheep, for our latitude, for the latter variety of sheep appears to be a connecting link between the fine and coarser breeds. In this cross, the lambs would gain the best possible chance for milk, whereby all points of carcass would have full chance for a natural development. But to let the large coarse breeds of sheep into a flock of small boned fine wooled ewes, would be ruinous to the flock, as I have seen fully tested. It is against the laws of nature to perfect a larger race of animals from females of much smaller stature. The carcass is not only too small to deliver the offspring, but incapable of affording sufficient nutriment, either in embryo or after birth. If mutton be the object, what can you produce better than the many valuable coarse varieties that have been introduced among us! If fineness of fleece, without any other consideration, the Saxon Merino never will be rivalled. If you desire a flock of good fair sized animals, sheep that will endure our climate, that are able to withstand the sudden changes of weather, with fleeces of fine grade, mutton not of the best quality, and yet palatable, then I contend that the Merinoes are the most profitable breed.

The Paular Merino, or what some term "old fashioned Merino," are the most hardy and most profitable of this breed. There appears to be a general visionary desire in many of the States, for crossing the many different breeds of sheep to obtain a new, distinct and valuable variety. As it requires several generations to obtain a new and perfect cross, no breeder can fairly try the experiment by a few crossings. Time and money could be better laid out in improving such breeds at hand as each may admire; by carefully selecting the most perfect bucks for the large and best breeding ewes; and in the mean time, if wool be the object, regard should be had as to quality and quantity of fleece; for constitution, size of limb and breadth of carcass; and a good breeder must have milking qualities.

In my view, the Merinoes are the most perfect sheep ever bred among us; and I would as soon think of an amalgamation of the Asiatic, African, or native American, with the Anglo Saxon race, to obtain an improved race of people, as to think of crossing any one of the coarser breeds of sheep upon the perfect Merinoes, to obtain a more valuable variety.

Many have crossed the Saxon on the Spanish Merino, but there is scarcely one experimenter that will now claim that he has effected any improvement, but very many will acknowledge that they have suffered a loss. It must be an established fact, that the fleece cannot be improved in fineness, except at the expense of carcass, nor the

carcass improved by high keep or a cross upon a robust or larger breed, without deterioration in the fleece. The in-and-in system, when continued to some extent, will also produce a finer fleece and a more slender constitution, although the stock bucks may be carefully selected. Many old breeders in this State, assert that their flocks have improved in fineness, which they attribute almost wholly to the peculiarities of our climate. The same may be said of our grass lands; the herbage is thicker, shorter, and finer in general, than can be found in distant parts. Our mountainous State may also exult in our freedom from those swamps and stagnant waters, which generate malaria, and those insects that are so annoying to the cattle and sheep of many other States and territories.

That every variety of sheep will thrive well in the same latitudes of country, is not to be supposed; and even the best breeds of Merinoes, may not succeed in all parts of the United States. It has been effectually proved, that sheep of the finer breeds cannot thrive well in England and Ireland, probably owing in part to the humidity of that climate.

In sheep, the many kinds that now prevail, may be attributed partly to *climate*, which acts on the thickness, staple and quality of the fleece, form and stature of the carcass. The coarsest of furs and wool of which I am acquainted, are the production of hot climates, and those of the thick, finer qualities, are mostly from the colder regions.

A certain degree of heat, though less than that of the tropics, appears favourable to increase of stature. The effects of different kinds of food upon the animal, are also as extensive and as wonderful as those of different climates. The fineness and coarseness of the wool, the firmness and flavour of the flesh, and extent of the stature, are all influenced by the nature of the diet. The South-downs, for instance, are said to have originated from a small hardy race of animals, which by careful attention and high keep, for a long succession of years, have perfected a larger race of beautiful animals.

The *manner of life*, also has had an influence in producing the different kinds of sheep, as will be seen by comparing the breeds in Spain, the migratory with the stationary; the Siberian argali, with the sheep which are said to have sprung from it.

But it is probable that a very great part of the more striking distinctions that prevail, and almost all of the subordinate variations occasionally to be met with, are the result of a *morbid and hereditary affection.* At first, by accident, or by some cause that we cannot discover, there has been produced an improvement or defect in a particular organ; it is astonishing to behold how readily it is often copied by the generative principle, and how tenaciously it adheres to the future offspring. Hence, hornless sheep and hornless cattle produce an equally hornless offspring. The broad tailed Asiatic sheep, yields a progeny with a tail equally monstrous.

Some years since I had a cosset lamb which became diseased with the converging strabismus or cross eyes; it was first brought on by a very severe chase it received from a dog, causing great muscular exertion and fright. All of her progeny, down to the third generation, have been marked with cross eyes, not able to discover objects but a few feet around them. Accident seems first to have produced this defect; but the strabismus has been wholly retained in the progeny.

There is a very peculiar variety of sheep described by Col. Humphreys, and which the American naturalists have called, from its bowed or elbow legs, *Ovis ancon*, but the common people, "the otter breed," from its resemblance to the general form of the otter, and a rumour that it was first produced by an unnatural intercourse between individuals of the two distinct kinds. So tenaciously has this deformity been preserved, that if a common sheep and Ancon sheep of either sex unite, the young will be either a perfect Ancon, or have no trace of it; and if two are lambed at a time, and one be of one variety, and the other of the other, each is found to be perfect in its way, without any amalgamation; therefore it might take several generations before the defect of bow legs could be improved in this variety, and otherwise retain the original size and features of the Ancon sheep in other particulars.

I trust that a picture of a Paular Merino buck, may be interesting and acceptable to the readers of this article. It is a favourite breed with me, and is gaining admirers generally throughout the wool growing region of the New England States. The above picture was taken a few days since from one of my stock bucks, by a good artist, while the fleece is but six months in growth. He sheared last June, thirteen and one-fourth pounds of washed wool, it being his third fleece. His live weight is about one hundred and forty pounds.—*Transactions N. Y. State Ag. Soc'y.*

All wish to be more happy than they can be, yet most might easily be more happy than they really are.

Manuring, a Science.

If there is one department of agricultural science more neglected by the practical farmer than another, it is that of manuring. Chemists have made calculation after calculation, experiment after experiment, but all to little or no purpose. The farmer—I mean the working farmer—who is one from necessity, has derived little or no benefit from the host of eminent individuals who have concentrated their whole attention on agricultural chemistry. Why is this? Why is it that the great and all-important discoveries of Davy, are still laughed at by many—but slightly attended to by all; at least by all those who would reap the greatest profit from them? 'Tis true that a wonderful progress has been made in agriculture within the last few years; and much has been done in the improvement of stock, perfection of machinery, &c., but very little in the science of manuring. And the circumstance appears to be still more unaccountable when we call to mind the fact, that there are greater means of improvement in this particular branch of husbandry, than any other; in no other department are the rudiments so well understood and so generally circulated, as in this. We know the constitution of every agricultural plant; we have analyses of every description of soils; we are well versed in the respective compositions of air and water; we have abundant means of ascertaining the constitution of all manures; indeed, we know and perceive all but the peculiar operation of the vital principle, and yet we are daily applying matter to soils in which a sufficiency already exists. Why is all this? Why is it that in some departments agriculture is rapidly advancing—in others, making no perceptible progress? It is unpleasant, and by no means the choice of the writer, to give the cause of this anomaly; but 'facts are stubborn things,' and it becomes no one to conceal the truth.

It is well known that the improvements which have been made in stock, are owing to the exertions of *experimental farmers*, and those who farm for example; independent of which it requires little or no calculation to improve stock—there are no scientific rules to be perused and committed to memory; it can be accomplished as well by a man of mediocre ability, as by one of a high order of intellectual capacity, provided he has perseverance. It must not be supposed, therefore, that no credit is due to those who have by their exertions improved the breed of any kind of stock. Credit is due to any one who confers the smallest benefit upon his fellow-creatures; but the purpose is to show why our breeds of animals have been so much improved, and another department of husbandry almost totally neglected. The cause, then, is that much in this respect has been done for the agriculturist, and there being little difficulty in what has been accomplished.

With respect to machinery, in which, perhaps, the most extensive as well as the most beneficial results have taken place, it need only be asked, who take the majority of prizes for machinery, at agricultural prize meetings? Not farmers, but machinists. This then speaks for itself; the improvements, the wonderful improvements made in machines, have been brought about by the machine venders, and not by farmers. It is readily admitted that it would be of no avail for machinists, &c., to construct new implements, if the farmer had no disposition to encourage their laudable exertions; still, it must be confessed, that the advance of agriculture in this department, is too little owing to agriculturists themselves.

The *true* signification of the word *science* is, a knowledge of all that *exists*, and of the laws that govern the operations of nature—a knowledge of matter, things, and systems. Whatever is done by a system, is done scientifically; nature does nothing, except by the interposition of nature's God, without a system. A knowledge of these systems is science, *generally;* a knowledge of any one system, *a* science. The numerous terms, the difficult rules, the complicated calculations, the mysterious analyses, are not *the science;* they are the handles, the guides, the agents which render the science comprehensible by the human mind, invented by human beings for that purpose. They are the channels through which the Newtons, the Lockes, the Davys, the Liebigs, convey the researches of their expansive minds to unborn generations. If science then, is a knowledge of the operations of nature, it must be from some unwholesome influence that so many individuals neglect to profit by it. The influence in the present instance, is *prejudice*—yes, prejudice—however disagreeable it may sound to those interested, it is too true; for what can it be but prejudice, that prompts men to say,—"Our forefathers prospered without science, and why should'nt we?" What can it be but prejudice, which induces men to believe that the system they adopt, admits of no improvement?

In order to render the question more intelligible, it may be asked for what purpose do men apply manure to soils? Most assuredly to supply a something which is requisite to the growth of a plant, and which

does not exist in the soil. Then, as we have the means of ascertaining what portion of a plant is supplied from the atmosphere, what from the rain which falls, and what from the soil, is it not evident that the slightest exercise of our reasoning faculties must enable us to judge with some degree of accuracy, what particular bodies or compounds should be added to the soil, in order that it may furnish the plant with due proportions of each of its component materials? If we once admit the possibility of the above statements—and who can deny that they are rational—we become advocates of science.

But in order to explain the subject more clearly, and that there may be no doubt as to the advantage of calling in the help of science, in the application of manures—in making manuring a science, instead of an art, we will imagine an instance which has frequently occurred;—two neighbouring farmers enter upon the occupation of adjoining farms at the same time, and it so happens that they have adjoining fields of three-year-old turf; the soil in each field being composed, as far as ocular examination can detect, of the same materials. Being old friends, they make no secret to each other of the system of cultivation they intend to pursue; consequently, being convinced that some application is necessary to the turf, and having heard that nitrate of soda has had a beneficial effect upon such crops in many instances, they each decide upon applying this manure at the same rate per acre, and as nearly as possible at the same time. The result is, that a great increase in the crop is produced in one instance—in the other, no benefit whatever can be discovered. The consequence is, that the one individual denounces the use of nitrate of soda, the other applies it almost indiscriminately in almost all cases. Meanwhile, this trifling circumstance probably engenders ill feeling between the two old friends, and all because they cannot discover "a clue to the mystery." The foregoing is by no means an exaggerated picture of an every-day occurrence. This is the consequence of making manuring an *art*.

We will now suppose the same case treated scientifically—the parties being fully aware that a plant cannot abstract that from the soil which does not pre-exist in it. Their first impulse is either to submit a portion of the soil to the analytical examination of the operative chemist, or, being chemists themselves, to ascertain of what the soil is composed—the one individual finds it will be improved by the materials contained in the nitrate of soda—the other, not only that this manure will be useless, but what composition is required; now this is manuring *scientifically*—this is making manuring a *science*. The advantages of the latter system are obvious.

A little consideration, will, nevertheless, render it by no means remarkable that, notwithstanding the means of making the application of manure a *science*, have been long placed within the reach of agriculturists, yet that they have been utterly neglected; since it is generally known that the application of *artificial* fertilizers is comparatively of a recent date; prior to which period the evacuations of animals, combined with decayed vegetable matter, formed the staple manure of the country. Now *farm-yard manure*, which was the chief application, contains every material that a plant requires; hence, if applied in sufficient quantities, it can never fail. But within a few years soils have been brought into cultivation, and those systems of farming have been adopted, which have compelled the agriculturist to introduce artificial manures, in order to supply the deficiency of natural. And from the circumstance that no artificial manures have been found, with one or two exceptions, to contain *every* material abstracted from the soil by plants generally, it is apparent that any one artificial manure is insufficient to maintain fertility in the soil. This renders it imperative upon the agriculturist to call in the assistance of chemistry, in order that he may be enabled to compete with other agriculturists; for if the soil requires phosphate of lime to produce a wheat crop, of what possible utility will it be to apply a manure which does not directly or indirectly afford that particular matter? And who can ascertain by mere ocular observation, whether the manure or the soil contains phosphate of lime?

If this problem cannot be solved by looking at the soil and the manure, what is the course to be pursued? We must endeavour to ascertain the composition of each, which cannot be done without the aid of science. It is very well to say, "Science was not necessary when my grandfather was a farmer." It is very well to say, "farmers have done well without science, and therefore it is unnecessary." But we must remember that our forefathers tilled the *richest* soil, at a time when farming produce realised almost double its present value, when receipts were larger and disbursements smaller, and when they had abundance of farm-yard manure to preserve the fertility of soil, without resorting to the application of lime, nitrate of soda, and other mineral, or artificial manures. Still

it is by no means extraordinary that farmers of the present day, should be opposed to the application of scientific rules; or if not opposed to their application, at least careless in applying them; for, as they justly observe, farming has been conducted without science, and they cannot yet perceive the very different position in which they are placed, compared with farmers even of the last generation. The human mind is so subject to the unhealthy influence of prejudice, that it is no wonder farmers of the present day should be disposed to follow with almost invincible determination, the customs of past ages; yet, however natural it may be that they should thus act, it must be a source of sincere regret to the enlightened, unprejudiced mind, that they should thus be heaping up trouble for a future day.—*London Farmer's Magazine.*

For the Farmers' Cabinet.

Disease of the Buttonwood.

The unhealthy appearance of the buttonwood tree, *Plantanus Occidentalis*, for the last three years, has been very generally observed through the Atlantic States, as well as in some parts of Europe. Many fears have been entertained, that this noble tree was about to be driven from our forests, and our yards: and these fears have been the more distressing, by the reflection, that its place could not be supplied by any substitute, in less than half a century. Indeed we have no tree, save the tulip poplar, that can at all compare with it in the rapidity of its growth, or its magnificent appearance, after having reached its full size. Where, for instance, are to be found such rows of trees, as those of 80 years growth, that raise their sturdy trunks above the hospital, on Eighth and Pine streets? I am but a poor pedestrian, but I would walk a good many of uncle "Toby's miles," to see their superiors; and if they are to be found in this country, or any other, it would be a gratification to learn their *whereabouts.*

It is sometimes said, the knowledge of a disease is half its cure. Some say the unhealthiness of the buttonwood, or sycamore, as it is often called, has been owing to late frosts, occurring at particular junctures, when the tree was ill prepared to meet them. But is this probable? Are not these indications of disease of very recent occurrence! have they been noticed till within the last three years? whereas, if the frost had been the cause, would not *that* be likely to have occasioned the mischief frequently before this, from year to year? And would it not, in all probability, have been far less general in its effects? It would, indeed, be very remarkable, if late frosts should work an uncommon and serious injury, to a particular plant, for three seasons in succession, not only over great part of the United States, but also in many parts of Europe. I apprehend the true cause is not to be found in late frosts.

A writer in the Taunton, Mass., Whig, says he found upon examination, that the "blighted appearance of the buttonwood, is caused by a white worm with a brown head. These worms, or borers, have inserted themselves between the bark and the hard wood, throughout the branches of the tree; and unless some discovery is made so as to poison the sap of the tree, and thereby prevent or destroy the worm when it first enters the bark, the beautiful button will cease to adorn our streets and dwellings."

Another writer in the American Traveller, of Boston, says he has discovered spots upon the trunks of the trees, "where the bark had assumed a dark appearance; and on opening it with the point of a knife, it readily peeled off, disclosing that the bark and surface of the wood under it were dead. These defective places extended from near the ground to the top of the trees, and on all sides. They were from half an inch to three inches wide, and from two to eight inches in length. There was no insect to be discovered, or traces of the ravages made by the larva, or perfect insect of any kind. The wood under the bark had become a dark brown, and was moist, as was the inner side of the bark, as if a little water had been collected between the wood and bark."

Now the writer of this has noticed appearances similar to those last mentioned—not on the *trunks* of the buttonwood in this vicinity, but on the *branches*, and particularly near the ends. Any one looking into the top, will perceive, to his sorrow, innumerable evidences of disease and death, on the extremities of the limbs.

The trees in this city and neighbourhood, have generally recovered their usual foliage better this season, than they did either last year or the year before: and I am not without a hope that we shall in a year or two, again see the seed balls as usual, and that the natural hardihood of this noble tree, will enable it to overcome the disease with which it has been so severely attacked—that it will yet continue to afford shelter and delight to our children's children, as it has to our fathers and ourselves.

If any of the readers of the Cabinet can point out a remedy for the more speedy re-

covery of this tree from what has so sadly, and repeatedly spoiled its beauty, and threatened its ruin, they will confer a favour upon many a lover of the SYCAMORE.

Agriculture.

We are highly gratified at the increased interest now manifested at the South generally, on the subject of agriculture, and we trust the day is not distant, when it shall be seen in the Carolinas and Georgia, that we are able to make our own corn, raise our own mules, horses, cattle and hogs, as well as our numerous cotton bags. But if we would do this, we must abandon the ruinous practice, so long pursued among us, of wearing out our lands, throwing them away, and clearing more until all is wasted, and then decamping and seeking a new home among the fertile regions of the far West. We must improve our lands; we must, by improving our system of cultivation, learn to plant *less* and make *more;* we must, without extending our borders, increase our resources, and thus virtually enlarge our territory.

"He is a public benefactor, who, by the prudent and skilful outlay of his time and money, shall make a single field yield permanently a double crop; and he who does this over a square mile, virtually adds a square mile to the national territory—nay, he does more: he doubles to this extent, the territorial resources of the country, without giving the State any larger territory to defend. All hail, then, to the improvers of the soil! Health and long life be their fortune—may their dreams be few and pleasant, and their sleep, the sweet repose of the weary—may they see the fruits of their own labour, and may their sons reap still heavier harvests."

But if we would thus improve the soil, and so become public benefactors, we must become acquainted with the nature and character of our soil, and what sort of culture, &c., is adapted to its nature, condition, &c., and to do this, we must read, yes, read as well as work; for whatever may be thought and said of "Book Farming" and "Theoretical Planting," we will find the following sentences to hold good in the main:

"Show me a thrifty, practical and experimental farmer, and I will show you a man who reads works on agriculture, or who borrows his hints from a neighbour who takes agricultural papers.

"Show me a farmer whose fences are going to decay; whose half-starved cattle are strolling over a brush field; and I will show you a man who, if he is not on the retrograde track, takes too little interest in agriculture, to patronize an agricultural paper."

But if we would read, we must take a newspaper: aye, that's the very thing we would recommend, for the borrowing system we never did like: take a paper yourself. "But this will increase my expenses!" Aye, true enough, it will from one to two and a half, or three dollars a year; but then if it increases the yield of your fields, two fold, and makes you a richer, happier and wiser man, surely you will not be much the loser in the end.—*S. C. Temp. Advocate.*

Explosion in a Pork-house--Lives lost.

On Saturday afternoon, 25th of February, a fire broke out at Cincinnati, in the smoke house of Messrs. Pough & Alvord, at the corner of Walnut street and the canal, which, in its consequences, was one of the most distressing that ever occured in that city. The Gazette says: "The smoke-house was in the rear, and somewhat detached from the main building, being connected with it only by a wooden door and narrow passage-way, through which the meat was usually wheeled. It was thought the fire could be confined to the former, and for that purpose the pork-house was closed as tight as possible, by shutting all the doors and windows, to exclude a rush of air to feed the flames. In the course of half an hour, the main building was filled with smoke, rarified air, and probably some inflammable gas, from the smoke-house, and when the flames burst through the wooden door connecting the two buildings, an instantaneous roar of flame was perceived, and in the twinkling of an eye, the whole of this spacious, substantial building, was a mass of ruins. The whole roof was lifted up in the air, and thrown into the streets in large fragments—the second story walls on the north and south sides were thrown down, and the whole eastern end of both stories, fronting on Walnut, blown into the streets, from its foundation up.

The appearance of the explosion was awfully terrific, and its consequences fatal to several of our most estimable citizens. It is thought that from eight to twelve persons were immediately killed, and probably twenty were severely wounded, some of them dangerously.—*Exchange paper.*

The brine in which cucumbers have been preserved, is said to be fatally poisonous to cattle and hogs. One of our citizens a few weeks back, lost a cow from her having eaten a quantity of pickles which had been thrown out in an exposed situation.—*Piscataquis Herald.*

Disease in Peach Trees.

Of late years, owing to the appearance of two diseases in our orchards, the peach has become comparatively short-lived and unproductive. These diseases are yet scarcely at all understood by the majority of cultivators. We therefore offer the following suggestions, with the knowledge, that if appreciated and carried into practice, this fruit will be found as healthy, fine and productive in our gardens now, as at any previous period.

1. The *yellows* is the greatest malady of the peach. It affects the whole tree, and the seedlings reared from it are also more or less diseased in the same manner.

2. The *yellows* is a *contagious* disease, spreading from tree to tree gradually, and it may be propagated by grafting or budding from the infected specimens.

3. The malady may be infallibly known by the following characteristics—a decidedly *yellowish colour* in the whole of the leaves of the tree; short and slender branches growing here and there, clothed with small, half-starved, narrow leaves, one fourth or one half the usual size; and mottled, small fruit, of inferior quality, ripening before the proper season.

4. A single tree, with this disease, will, by its contagious influence, gradually destroy a whole orchard of healthy trees. No pruning, or mode of treatment hitherto discovered, will restore to a healthy state, a tree thoroughly diseased with the yellows.

5. It is absolutely necessary to *destroy all trees having the yellows*, in order to insure a sound condition in young plantations yet healthy. In small gardens, where there are diseased trees contiguous, the neighbours must be prevailed upon to enter into the plan. In farms and larger places, it will generally be sufficient to destroy all victims of the yellows on the premises, as the disease spreads slowly. In trees received from nurseries, there will frequently be found an infected subject, and it should be at once rooted up, and its place supplied by a healthy tree. It is much better to destroy a single tree, though young, at once, than by allowing it to stand, in the vain hope of its recovering, to spread disease among all in its neighbourhood.

If we direct our attention to this matter, we shall find in almost every neighbourhood, a number of sickly and diseased trees, which although worthless, are allowed still to occupy the ground. Very frequently an old and favourite tree, now *lean and jaundiced*, occupies year after year, a corner of the garden, more from the recollection of the fine fruit it once bore, than from any present value. If we desire healthy and thriving peach trees, all these diseased specimens, old or young, must be entirely exterminated. While these are allowed to stand in any garden, disseminating a contagious disease on every side, it is idle to hope for healthy and long-lived trees.

The second enemy to this tree is the *peach worm* or borer. This insect (*Ægeria exitiosa*) deposits its eggs in the soft part of the trunk, just at the surface of the ground. These, on becoming borers or grubs, perforate and consume the bark, and in time girdle and destroy the tree. To maintain an orchard in good health, so far as regards this insect, it is only necessary, every spring, to remove the earth for three or four inches at the base of the tree, and to cut out and destroy with the knife every one of the borers. Their presence is generally indicated by gum just below the surface of the ground, and a little practice will enable a man to go over an orchard of an acre, in a day.

The productiveness and longevity of the peach tree will be greatly promoted by shortening or pruning the extremities of the branches of bearing trees, from one to two feet, in July, every year. This will keep the tree full of bearing buds and healthy wood.

A. J. Downing.

From the Prairie Farmer.

The disease called Hooks--Pterigium.

Mr. Editor,—In the April No., page 84, there is an inquiry by A. Beach, for information on the above disease—its nature, origin, remedy, and whether or not it be contagious.

The disease is not contagious. It has its origin in a thickened condition of the white coat of the eye-ball, (*Tunica Sclerotica*,) just where the upper and lower eyelids meet together in shutting the eye; the pressure of the lids and frequent winking, appear to pinch up a small fold of said coat. Irritating causes, by degrees, induce inflammation in it, and the blood vessels which in health carry only lymph or white blood, now become enlarged and circulate red blood, and appear fan-shaped, converging from the corner of the eye towards the pupil, and threaten to cover the glass of the eye (*Cornea*) with a film.

The only perfect or sure remedy for the disease, when confirmed, consists in catching or hooking up this thickened mass of vessels, on the point of a sharp hooked needle, (*Tenaculum*,) and cutting off the fold thus hooked up with a pair of scissors, cutting transversely, or across the vessels, until all are divided.

M. L. Knapp.

April, 1843.

For the Farmers' Cabinet.

Raising Water.

Those who have an abundant supply of water for all domestic purposes, and for the use of stock, from streams, fountains, or springs near their improvements, can scarcely appreciate the labour and vexation with which those are taxed, who have not a drop of this essential article within half a mile, unless it be at the bottom of a well from 40 to 80 feet in depth. To draw all the water needed by a family, from the bottom of a deep well, is a vast labour, and under such circumstances, the quantity used is much less than would be desirable.

In this age for improvement, perhaps some of your intelligent readers may be able to inform your subscribers of the cheapest and best method of elevating water from a well 50 or more feet in depth, by means of horse or mule power. Is a lifting or forcing pump the best, and what machinery is best adapted and least likely to get out of order? also what would be the expense and quantity of water raised in a given time? Any information on this interesting subject, communicated through the Cabinet, would be very acceptable to many who reside in limestone districts, or other places where water lies at a low level. The best method by which the power for raising water may also be applied for turning a churn or grindstone, would be very desirable. It is said that in some places the wind is used as an agent for pumping; any information on the efficiency of this mode of bringing water up from below, will gratify one of your oldest subscribers, who has often been wearied with working a long pump in a deep well, and of turning a windlass for raising water.

P.

Birds—Eggs.

It is an interesting fact in natural history, that if you remove one or more eggs from the nests of some birds, before they have completed their natural complement, they will continue laying a great number afterwards. Thus if the peewit, (*Tringa Vanellus*,) is deprived of only one egg after she has completed her number, she immediately forsakes the rest; if, however, she has but one other to lay, and all but one of her eggs are removed, she will continue to lay for ten or twelve days, and sometimes more, successively. The same has been observed of the blackbird, lark, and the long-tailed titmouse; the latter has gone on to lay as many as thirty eggs before she began to sit, a friend of mine having removed that number. In the case especially of the lark, if only one or two eggs are allowed to remain in the nest, the bird will go on to lay for a time indefinite; but if there are three she will sit. The usual number of eggs in a lark's nest, is five.

This is one of those mysteries in nature, which it is not easy to account for. We find that a bird, as soon as it has deposited four eggs in its nest, as in the case of the lapwing, immediately ceases to produce any more; but if disturbed in its arrangements, will go on to lay perhaps five times that number, and yet cease the moment it has collected its usual number for hatching in the same spot. This property does not seem to belong to our domestic fowls. A hen, when she wants to sit, will as readily do so upon one egg, as more, and so will a turkey. This latter bird is of a very torpid nature, and will continue to sit for many months together, on a very scanty supply of food. The persons who breed very early poultry for the London market, have a secret for preserving the vital property in eggs laid in the spring and summer, till late in the autumn, when they are put under turkies who have been kept sitting, and are hatched early in the winter. These persons chiefly reside near Chertsey, in Surrey, and the neighbouring country; and the secret for preserving the eggs in a proper state for hatching, is strictly preserved amongst them. I have visited one of their cottages, and found the only room surrounded with small square pens, in which the turkies were sitting. They are occasionally taken off the nest for a short time, and then returned to it.

It appears difficult to assign a reason why birds of the same size and species, should produce eggs of a different shape and colour. The hedge sparrow's egg is blue; while that of the robin, who lives on the same sort of food, and is like it in various particulars, produces an egg of a darkish brown and white colour, ornamented with yellowish brown spots. The cormorant has pale green eggs, while the egg of the gannet is white: both these birds feed on fish. The eggs of the rook, magpie, and lapwing, are nearly similar in size and appearance. Those of the pigeon, owl, and king-fisher, are white; and those of the blackbird, of a bluish green. In like manner, the eggs of the land tortoise are of a dusky brownish white; and those of the crocodile, of a bluish white. Even hens in the same poultry yard, and fed on the same food, produce eggs of a different colour, some being much darker than others. I have also observed that some ducks of the same breed, have white eggs, and others bluish ones. Hens sometimes produce eggs with

a double yolk in them, and others have been found with a double shell. It is a curious and interesting fact, that the spot on the upper surface of the yolk of an egg, being that in which the future chick is placed, is so much lighter than the opposite side, that in whatever position the egg is placed, this part is always opposite to the belly of the incubating bird.*

Another wonderful fact respecting eggs, is that some birds have the property of either retaining their egg after it has arrived at maturity, or of suppressing altogether the further progress of those eggs which had arrived at a certain size in the ovarium. I have on several occasions purchased pullets for my farm-yard, which had just begun to lay. Perhaps on their way to their new home, they would drop one egg in the basket in which they were confined; but I have invariably found, that on arriving at a strange place, they have altogether ceased to lay any more eggs till they had become habituated to their companions, and had made themselves acquainted with the localities of their new situation. We know, on opening a pullet which has just begun to lay, that there is a regular succession of eggs of different sizes in the ovarium. Some are nearly complete, others are as large as a marble, and others of the size of a pea. The circumstance of birds being endowed with the extraordinary property of preventing the eggs from arriving at maturity when their usual habits or place of abode have been changed, is one of those facts in natural history on which little light has yet been thrown. If the leg of a pullet is broken after she has laid two or three eggs, and she is thus prevented from seeking enough of that substance which is necessary to be taken into the stomach with her food, for the purpose of encrusting the egg, she will perhaps drop one without a shell, and then cease altogether from laying any more till the bones of her leg are knit, and she is able to go about as usual. She then begins to lay again, but the number is regulated by those she had previously laid. Suppose, for instance, she had laid four eggs before her leg was broken, and that the quantity in her ovarium when she first began, was sixteen, she would, when she resumed her laying, only produce the remaining twelve. From this it is clear that a certain quantity of some material—lime and chalk probably—is necessary to enable a hen to produce a perfect egg, and that the want of it retards the process going on in the ovarium, without producing any immediate injury to those eggs which were in a gradual process towards maturity. In the instance already mentioned, of hens ceasing to lay on being brought to a strange place, it was probably occasioned by their restlessness, and not knowing at first where to go in search of what was necessary to bring their eggs to perfection. It is much to be wished that this curious subject should engage the attention of naturalists more than it appears to have done.—*Jesse's Gleanings, vol.* 1.

* Blumenbach.

For the Farmers' Cabinet.

Prudent treatment of animals when young.

The subjoined article met with in the Maine Farmer, I take the liberty to send for the Cabinet, concluding that the good, sound, practical sense, running through it, and communicated in so animated a style, should not be confined to the paper in which it originated. "Train them while young!" Aye, what a volume of advice is expressed in these four words! and well would it be, if we would extend their application beyond the subjects directly before us, to the nurslings around our hearths. X.

Solomon says, "Train up a child in the way he should go, and when he is old he will not depart from it." This is true in regard to children as a general thing, but it is, if possible, more true in regard to animals of the lower orders, for they, not having so much scope of intellect, are not led about by propensities which so often overcome all the dictates of reason and the salutary trainings of youth.

Every domestic animal, from the hog upward, is susceptible of education, more or less, and should receive it when young. The little pig, if subject to being handled and rubbed while with its dam, is always much more manageable when it becomes a hog, and may even become *amiable*, in a hoggish way, and very susceptible to the "Mesmeric influences of a rubbing stick," when applied in a proper manner to the tickling of his sides, to make him "shoulder over" and go into a state of "*clairvoyance*." If farmers or farmers' sons, would take a little more pains to familiarize young animals, such as calves, we should not have so many vicious, kicking cows, or headstrong, crowding, runaway oxen. But this system would be still more productive of good among horses than any other class. The Arab horses are supposed to possess more natural docility than any other breed. Perhaps they do, but we doubt if they are endowed by nature with

any more kindness of spirit than those of any other country. The account given of their management by travellers, explains the whole mystery. The Arab and his family, and his mares and colts all lie together. The mare and the four-legged colts, and the two-legged colts, all lie down together and play and become familiar with each other, so that an Arab's horse is perfectly broken by the time it is a month old. In this country, many colts are never so much as touched, much less handled and caressed, until they are three or four years old, or large enough to use. And they are *conquered* rather than tamed by kindness.

Hence it is no wonder that we have horses that are hard to catch in the field, when they see a man coming towards them —or are shy, or contrary and vicious. It is only the rising up of that spirit of defence which nature has implanted in them. Their first knowledge of mankind commenced in war, and their instinct leads them to look out for a battle whenever they have any thing to do with them. A little, very little time spent with such animals when young, would save a vast amount of trouble, labour and vexation, through their lives. Train them while young—it is not necessary to work them any to make them familiar with all the routine of duties that will be required of them when older. But familiar handling —and training them to the word and the will, is all that is needed.—*Maine Farmer.*

Letter from H. Colman.

We are gratified in being able to give our readers a letter received from this gentleman by the last steamer. It will be seen that he enters upon the objects of his tour under the most favourable auspices, and we have reason to believe that every facility will be afforded him, necessary to enable him to make his proposed publication more valuable to American farmers, than any work hitherto published on the subject of British husbandry. We hope he will bear in mind the impatience with which it is awaited, and favour us with his first part at the earliest period possible. He must necessarily, however, occupy many months in his examinations and in the collection and arrangement of his materials, before he will be prepared to commence writing his survey; and we can hardly expect the publication of the first part before some time in the ensuing winter.

At the meeting of the council of the Royal Agricultural Society, on the 21st of June, as we learn from our London papers, Mr. Colman was present, and presented the Society with a model of Atwater's Steam Generator—samples of sugar made from cornstalks —several specimens of flax, prepared by steam, with a view to its being spun on common cotton machinery, and a specimen of perennial flax, from Mr. T. J. Walker, Eckford, Michigan; also various specimens of silk and cotton; upon which, "Mr. Pendarves, M. P., moved a vote of thanks to Mr. Colman for the interesting specimens and details he had brought under the notice of the Council; and having dwelt on the advantages the Society would derive from the information Mr. Colman, as one of their honorary members, would from time to time, lay before them during his present visit to England, he would, he trusted, be enabled, after his agricultural tour through the kingdom, and especially after his personal attendance and inspection at the ensuing Derby meeting, to carry back to America a favourable report of the agricultural improvements of the old country." The chairman, Lord Portman, was quite sure that the proposition required no seconding; and the motion being put, the vote of thanks was carried unanimously.

Mr. Colman attended the meeting of the West Sussex Agricultural Association on the 16th of June, and was introduced by the Duke of Richmond, who said:—"I beg to propose the health of a gentleman from the United States. I have much pleasure in introducing him to the farmers of Sussex, as one who was engaged in the inquiry into the agricultural affairs of America. I have seen the report of that inquiry, and know that no one could have written such a work on the subject, unless he had been well aware that agriculture was of the first importance in all countries. I had the pleasure of introducing him as an honorary member of the Royal Agricultural Society; and I now introduce Mr. Colman, who sits by Mr. Dickens, not as a stranger, but as a descendant of those who were one with us, and as a brother citizen. The disputes with America, have been happily settled, and let us hope that we may long remain in amicable relations with the United States. I ask you to drink the health of Mr. Colman, with three times three; and then show your response to the sentiments which I have uttered, and may our only rivalry with them be, who can produce the best men and the best farmers." (Loud cheers.)

Mr. Colman, on rising to return thanks, was loudly cheered; and after a brief and pertinent response, which was loudly applauded, gave—"Success to the beneficent landlord, and success to the honest and industrious labourer."—*Cultivator.*

London, July 3d, 1843.

LUTHER TUCKER, ESQ.:

DEAR SIR,—I intended sooner to have had this pleasure; but life in London consumes one's time very much as a North river steamer consumes the fuel; and at the close of the day or the week, you can about as well say what has become of it. Such a rushing torrent of human life as the great avenues in this city present—and really, speaking of *great* avenues, one street seems very much like another—it is hardly possible to realize but from actual observation. The Strand, Holborn, Piccadilly, Regent street, Westminster bridge, London bridge, &c., &c., with their coaches and carts, and barrows and omnibusses, and horses and dogs, and very often droves of sheep and oxen, and people of all nations and costumes, in silks and tatters, in elegance and squalidness, some with clothes on of course, and some I had almost said without any, equally matter of course, I judge, with them; some running, some creeping, some talking, some singing, some crying, some reading, some musing,—present, indeed, from the top of an omnibus, where you can take in the whole line, one of the most striking and curious scenes imaginable, and infinitely amusing and instructive. It resembles nothing so much, as the breaking up of one of our great rivers in the spring, or at the time of a sudden freshet, which sweeps the fields of their ripened crops, when down come cakes of ice of all imaginable shapes, tumbling over each other, and logs and slabs, and broken fences, and parts of buildings, and countless other things, mingling in all possible confusion, and all driving with an irresistible impetuosity to the ocean. But there is this difference, that here in the streets of London, crowded as they are, and presenting continually opposing currents and eddies and whirls, there is no confusion or rubbing, or chafing, but all get on with good humour and quiet. The omnibus drivers in London, seem to me the perfection of "whips," and the very personification of skill and discretion in their particular art; and though I have rode miles and miles on the box with them, and on some occasions where the street was filled with a continuous string of all sorts of carriages and vehicles, four deep, from the chariot of the peer to the wagon of the coal-heaver and the donkey barrow of the dog-meat seller, I have never seen any entanglement, any running against each other, nor heard a single profane or rude word on any occasion. This certainly speaks well for the people. The law of courtesy and civility reigns supreme among all classes of them; neither by day or evening, and I have been in all parts of the city, have I seen, but in one instance, a single act of quarreling, and that a case of absolute drunkenness and degradation; and not even at Epsom, where I attended the races, and where, it would seem to me, on the day of the great stakes, a hundred thousand people were assembled. Undoubtedly there is vice enough in London, and parts of it are, as is to be expected, festering with moral corruption; but these facts speak volumes in the praise of the people, and show the admirable character of their police, and the advantages which come from making manners a study.

You and my agricultural friends in the country, will be happy to hear that I have been received here by the distinguished friends of agricultural improvement, with the most cordial welcome, and am promised the most ready and ample aid and encouragement to my inquiries. I have already been a good deal in the country, and after this week, leave the vicinity of London for some months. I am not disposed to institute any invidious comparisons between this country and my own, for I see no grounds for such comparisons. However separated in their location, their interests are coincident and the same; and I venture to say that no conviction impresses itself more strongly upon the mind of a wise and humane man, when he comes here, than the *unnaturalness* of enmity or war between two such countries, united as they are by a common origin, a common language, and a universal interest in the maintenance of peace and good will. My mission is regarded with favour, and I shall spare no pains to render it as useful as my limited ability will enable me to do, to my country. Agriculture is pursued here with an intelligence, spirit and liberality, which are most remarkable and delightful; much has already been done, and the most valuable results are to be confidently expected. Our country must share in the benefit, and the fire kindled and kept burning so brightly here, must extend its light and heat to both hemispheres.

I shall keep my friends in America advised of my whereabouts and whatabouts; and any letters directed to me at London, care of Baring, Brothers & Co., will be duly received. The steamboat postage, however, must be paid in America, in order to their being sent.

With all good wishes, I am yours, truly and respectfully, HENRY COLMAN.

THE subscriptions of our friends for Colman's Agricultural Tour, will be received with pleasure at the office of the Cabinet.

Analyses of Indian corn and Ruta-baga.

To the Editor of the New-England Farmer.

Dear Sir,—In your last week's paper, you expressed a wish for analyses of Indian corn and of ruta-baga. They are herewith enclosed—and for the purpose of comparison, potatoes are added.

100 lbs. of—	*Corn.*	*R. baga.*	*Pot's.*
Contain of		Fresh dug.	Fresh dug.
Flesh-forming principles—Gluten, alumen, &c.	1,26	1.	2,07
Fat-forming principles—as gum, sugar, starch, woody fibre, oil, &c.,	88,43	13.	24,34
Water,	9.	85.	72.
Salts,	1,31	1.	1,39
	100	100	99,80
The salts are composed as follows:			
Of potash,	0,200	0,373	0,676
Soda,	,150	,165	,391
Lime,	,035	,125	,055
Magnesia,	,128	,040	,055
Alumina,	,016	,005	,008
Iron oxide,		,004	,006
Silex,	,434	,067	,011
Sulphuric acid,	,017	,127	,090
Phosphoric acid,	,224	,057	,067
Chlorine,	,008	,037	,026
	1,312	1,000	1,386

The acids and the chlorine are combined with the alkalies, metals and earths, and form salts, called sulphates, muriates, and phosphates of potash, soda, lime, &c.

You wish to know what is the *action* of the salts? So far as chemistry has yet gone, these are found combining with the flesh-forming principles only, and never with the fat-formers. They form a part of flesh, blood, sinews, bones, gristle. They are found in the animal body, only in combination with these tissues, or in certain secretions and excretions. As the elements of the animal tissues are identical in composition with certain parts of vegetables, which alone form them, we may infer, that in the animal and vegetable systems, the salts perform similar parts. Rigid analysis would probably show that the salts are always proportional to the flesh-forming principles. As in the animal body, the salts form not fat, so in the vegetable, they form not a part of starch, gum, sugar, wood. Essential they are to the formation of the plant, by which the fat-forming principles are produced, and equally essential to the growth of the animal body. How they act, is unknown. It is determined by chemistry, that the salts form certain definite proportions of certain parts of the body. We may infer then, that their action is, to form only the substances of which they are essential elements. If supplied in quantity greater than the body requires to form these elements, they would probably be excreted as useless. Unless then, you have some evidence that salts act on animals, as in some cases on plants, to increase bulk and development, the position that salts exert "a greater action, in proportion to their quantity, upon the animal system, than the organized matters," requires further proof. Now, this proof, chemistry expects from practised cattle-feeders and stock-raisers. The analyses above, compared with your experience, may throw some light upon the subject. With regard,

Samuel L. Dana.

Poultry Yards.

Every farmer should supply his table chiefly with fresh meats from his poultry yard. By proper attention, it may also be made a source of profit in addition. A yard of suitable size, enclosed with pickets, including a poultry house, and a supply of fresh water, and a pond to wash in, are indispensable to the success of raising poultry.

To ensure a plentiful supply of eggs in winter, let the fowls have a warm habitation in which they can remain through the day in cold severe storms, with room to move about. Place a trough about four inches wide and four inches deep, and length according to circumstances, within the yard, with a roof so low as to prevent their getting into the trough; keep this well supplied with feed, that they may have it by them constantly. In summer, let them out once or twice a day to ramble awhile, if you have no crops near enough to be injured by their depredations. As they are somewhat carnivorous, some kind of fresh meat is necessary for them once a day in winter, when they are not supplied with insects.

No poultry is profitable to be kept after three years old. Something depends however, on the breed and the manner in which they are kept. The Poland top-knots are considered as the best for eggs, and are sometimes called everlasting layers. They are more hardy than most kinds, for the extremes of weather.—*Farmer's Gazette.*

He who neglects Religion, prepares for himself a bitter draught—a meal of wormwood, a bed of briers, a pillow of thorns, a life of vexation, and a death of sorrow.

For the Farmers' Cabinet.

Peach Trees.

The present being what in common parlance is called a *peach year*, and as many of the most esteemed varieties of that valuable fruit, which have been perpetuated for thirty years or more, by budding or inoculating, are running out, I would suggest to farmers or growers of this delicious fruit, the propriety of saving the stones of the best kinds for planting, so that we can commence again with seedlings of the most valuable sorts, which may be extended by budding, for ten or twelve years, when resort should again be had to seedlings. It seems now to be admitted by all observant cultivators of fruit, that resort must occasionally be made to seedlings, in order to perpetuate good fruits of any kind; grafting, budding, cuttings, layers, and suckers, being a mere extension of the original plant or tree, and the only way of procuring a young and vigorous tree, is by recurring to the seed. Fruit trees, like animals, have their period of youth, maturity and vigor, old age, decline, and death, and no care or management can prevent their passing through these various stages; our only plan is to resort to the seed and select the best varieties for cultivation and extension, by budding, &c., as the old stock shows symptoms of declining, from age or infirmity. O.

That we must *strive* for culture, does not discourage the youthful mind; the thought rather enlivens and exalts it, that one, through his own power, and by bravery of spirit, not by sighs and penances, can bring into the kingdom of self culture, the powers which slumber in him. The harvest has not been easy even to the heroes of our race. So much the more necessary is it, for our small minds to be watchful and industrious, that we may rise to more shining heights which dawn upon us over the broad wastes on which the greater part of our race wanders. No smooth plains, upon which we may dream, speculate, and poetize, lead to them, but they must be climbed gradually, and with much toil.—*Common School Journal.*

The Farmer's Creed.

Let this be the Farmer's creed—
Of stock, seek out the choicest breed;
In peace and plenty let them feed;
Your land sow with the best of seed;
Let it not dung nor dressing need—
Inclose and dress it with all speed,
And you will soon be rich indeed.

John Sinclair.

THE FARMERS' CABINET,

AND

AMERICAN HERD-BOOK.

Philadelphia, Eighth Month, 1843.

The opening of a new volume would seem to invite a more direct interchange than ordinary, of friendly greetings between the editor and his readers. We have now travelled together for a year; and this, in the good natured language of one of our old English essayists, makes us acquaintances of some *considerable standing*. We have, however, little to say in the character of an Address: the past is beyond recall; and the future must rely upon exertion, not promises. It has been our aim steadily to keep in view, the advancement of the agricultural interests of the country. We have endeavoured too, always to bear in mind, and consequently to impress upon our readers the important truth, that if we would better the condition of our vast farming population, we must have reference to the mind, as well as the soil; and while we give the strength of the body to the improvement of the one, we should by no means overlook that culture of the other, which most directly concerns ourselves and our children. This will continue to be our aim; and while we tender our thanks, sincerely and respectfully, to the numerous correspondents, who have for the past year, so liberally supplied our columns with valuable matter, we solicit a continuance of their communications. We are well aware, that however assiduously we may give our labours to the Farmer's Cabinet—and with whatever judgment and skill we may make our selections, much of the variety, and the pith, and the animation of our paper, must depend upon the active good will of its correspondents, and the frequency with which they may favour us with original articles containing their views and experience.

We mean to hold on the even tenor of our way, and hope to make the coming volume, as we believe the one just closed, to be, many times more valuable to the farmer who peruses it, than the trifling amount of his subscription.

The senior editor having withdrawn from the Cabinet, it is hardly necessary for us to suggest, that although we hope not to be entirely deprived of the aid of his able pen, yet we shall still more than ever, need the assistance of our friends.

A friend at Easton, Md. asks for some "hints on the best method of preparing the ground for timothy and lucerne; and the latest time at which they can be sown, to produce hay and soiling grass the next spring." Lucerne had better not be sown with timothy or any other grass; but alone, as early in the spring as the ground can be prepared, either broadcast or in drills. It is, however, sometimes sown in the fall. It will hardly be fit to cut the first season, but will afterwards yield several crops, if it does well. We cannot do better, at present, than direct our friend to two good articles on the subject, in former volumes of the Cabinet: the one on page 293, vol. 3; the other, page 334, vol. 4.

Sweet potatoes from New Jersey, were in our market on the 2nd instant.

THE June No. of the "British American Cultivator," published at Toronto, Canada, mentions an Ox exhibited in the early part of spring, in that city, weighing 1945 lbs., including beef, hide, and tallow. "It was owned and fed by Mr. Nightengale, butcher, and was the best fed beast, that was ever slaughtered and sold in the Toronto market."

A writer in the number just referred to, says the best way to get shut of the Canada thistle, is to make the land rich, get a stiff sward upon it, and then cut the plant from time to time, very close, without letting it flower.

It gives us pleasure to refer to this paper. It is judiciously conducted; and we always hail it, as one from which we expect to receive instruction.

THE editor of the Salem (Ohio) Register, of the 18th ult., says he was presented, the day previously, with a stalk of timothy from the farm of Abraham Bonsall, near that place, measuring six feet eight inches.

ONE of our Maryland friends makes some inquiry in relation to the curing, &c., of corn that has been sown purposely for fodder. Among the advantages of this crop, when sown broadcast, may be reckoned its usefulness in soiling. For this purpose, it should be sown at different times, at intervals of ten days, or so. Some should be sown quite early in the season. It may thus be found to answer excellently in midsummer, when the pastures are short, and the drought would otherwise make green food scarce. When intended for winter fodder, it should not be suffered to become too old. It should be cut before the tassel appears—well and thoroughly dried—and when put away, it should have a peck of salt to the ton. We consider corn fodder more valuable for summer, than for winter feeding. The Northern sweet corn, is perhaps the preferable kind to sow: the stalk is not so hard, nor so stout, and contains more saccharine matter.

WIRE Ropes have since 1834, been generally introduced in the mines of Saxony, and latterly they have been used at some of the coal mines in the Northern counties of England, and on most of the rail-roads where stationary engines are employed.

In a late number of the Journal of the Franklin Institute, it is stated, that the price of hempen rope of 288 threads, is per lachter (equal to two French metres, or 78¾ English inches) 1 thaler 20 groschen, about one dollar twenty-seven and a half cents of our money. An iron wire rope, used in the place of the above hempen rope, costs per lachter, about forty-six cents. A hempen rope of 336 threads, the largest used in the mines, is one dollar thirty-eight cents per lachter: this is replaced by wire rope of 16 wires, at forty-seven cents per lachter. Hence it would appear that the wire ropes are nearly two-thirds cheaper than those of hemp, which they may supersede. Under many circumstances too, they are said to be more durable, particularly in moist situations, or where the rope remains for a long time coiled on the drum, when it decays from mildew. Further, the wire ropes are but one-third the weight of the hempen, which they replace. It should be borne in mind, that having much less elasticity, they must be coiled on a drum of greater diameter, than is necessary for the hemp.

WE understand that Dr. Darlington, of Westchester, is to deliver the annual address before the Newcastle Agricultural Society, next month.

FROM our exchange papers from various parts of the Union, and from other sources, we come to the conclusion that the crop of wheat has been a fair one—quite an average one, but not anything extraordinary. Although about the time our wheat was fit for the cradle, there was a week of very dull drizzly weather, we have been glad to learn that the injury to the grain was not of very serious extent, nor near so great as some anticipated. Rye was better than it has been for some years—oats were short. The crop of hay also, through this State, Delaware and Jersey, is said to be quite deficient, owing to the coldness and backwardness of the spring, and the pinching drought that preceded its ripening.

A writer in the Woodbury Constitution, about the middle of last month, suggests to his brother farmers, the propriety of putting in an extra quantity of rutabagas, to meet the inconveniences of a short hay crop. It is now too late to profit this season from the hint, but it may be well to recollect it in future, should a similar necessity occur.

The same writer, after several years experience in the turnip culture, remains a decided friend to it, and thinks farmers might as soon neglect to plant potatoes for themselves, as turnips for their cows.

POUDRETTE.

ARRANGEMENTS have been made by the Publisher, with D. K. Minor, of New York, for the sale of this valuable manure. It may be obtained at the office of the Farmer's Cabinet, No. 50, North Fourth street, where we expect to keep a supply constantly on hand. The price will be two dollars a barrel, where one or two only are taken—for three or more, it will be somewhat reduced.

ON looking into the garden of a friend a few days ago on Pine street, we were much pleased with his experiments in "laying" three different varieties of the grape: the Isabella, Catawba, and Elsinborough. He had taken the hint from the suggestions on page 81, of our last volume, and has succeeded beautifully. He had recently separated the main "layers" from the parent stocks, and all were doing well. The plants have taken root in the boxes, and on the intermediate buds of the Isabella and Catawba, were several healthy bunches of grapes well shouldered, and altogether finely illustrating the plan proposed by our friend N.

Some of our native grapes are of remarkably easy cultivation; and if more of our farmers who attend market, would stick a vine here and there, at the ends of their buildings, where they would take up no room that would be otherways appropriated, many a bushel of fine fruit might they exhibit on their stalls, and many a silver dollar might they carry home, which they now miss: to say nothing of the wholesome luxury that would thus be more abundantly afforded our citizens.

THE New Haven Daily Herald, speaks of having received some pears, taken from a tree full two hundred years old.

The fifth number of the "*Biblical Cabinet*," containing the concluding part of Neander's History of the Christian Religion, during the first three centuries, has been published by James M. Campbell & Co., 98, Chestnut street. This number, or the work complete in five numbers, price one dollar and twenty-five cents, may be had of the publisher, or at this office.

In looking over the 11th & 12th No's. of the *Farmer's Encyclopedia*, now in the course of publication, by Carey & Hart, at the corner of Fourth and Chestnut streets, we are quite of the mind that they are equal in interest to those which have preceded them. Both the publishers and the American editor, have sustained themselves admirably in this work: we trust it will be properly appreciated.

"PRODUCTIVE FARMING; or A Familiar Digest of the recent discoveries of Liebig, Johnston, Davy, and other celebrated writers on Vegetable Chemistry: showing how the results of English tillage might be greatly augmented; by J. A. Smith,—published by Wiley & Putnam, New York:—price 31¼ cents." J. W. Moore, bookseller, No. 23, Minor street, Philadelphia, has sent us a neatly printed pamphlet, of 150 pages, with the above title. It is a compilation, the object of which is, to simplify and render interesting to all, the more scientific and technical writings of such men as are mentioned above. The intelligent and inquiring farmer will read this little book with pleasure and advantage. While it renders familiar the heavier investigations of science—it aims to disseminate those sound and rational views of the necessary relations between *practical farming* and *practical science;* without which agriculture must still lag behind the age, and though the first and most important of all arts, remain long stationary. The work may be obtained in Minor street, as above, or of Kimber & Sharpless.

"RELIQUÆ BALDWINIANÆ: Selections from the correspondence of the late William Baldwin, M. D., surgeon in the United States navy; with occasional notes, and a short Biographical Memoir, compiled by William Darlington, M. D."

This volume, just published by Kimber & Sharpless, consists principally of the botanical correspondence of Dr. Baldwin. The lovers of nature, and the admirers of native worth, to whom these characteristic *Remains* of his excellent friend are respectfully inscribed by the compiler—himself a distinguished botanist of Chester county, and well known by his *Flora Cestrica*—will really, it seems to us, pore over the volume with the warm feelings due to long acquaintance and personal friendship. An amiable simplicity of character, and a warm hearted frankness, are strongly marked in the correspondence, as well as an unflinching ardor in the pursuit of his favourite study, under the pressure of enfeebled health. Ambitious to study upon the spot the natural history of the West, Dr. Baldwin joined Major Long's expedition in 1819: his strength however failed him, and he died the same year at Franklin, on the Missouri, in the forty-first year of his age: and the wild flowers of that vast region, with which he so desired to become acquainted, have ever since, been blooming around his grave.

The Autumnal exhibition of the Pennsylvania Horticultural Society, will be held on the 20th, 21st, and 22nd of next month, in the saloon of the Chinese Museum. We will give a list of premiums offered in our next number.

Our minister, E. Everett, partook of the festivities at the annual dinner of the Royal Agricultural Society at Derby, England, on the 14th of last month; Earl Spencer in the chair. In the course of some remarks he made, which were repeatedly and loudly cheered, he illustrated the incalculable importance of agricultural pursuits, and the value of agricultural labour, by comparing some of its items with the value of the whole trade between Great Britain and ourselves. "The commerce between our two countries," said he, "is the largest that is carried on between any two countries on the face of the globe. The annual commerce between Great Britain and the United States, is nearly two-fold that which you carry on with any other people. The entire annual movement of this commerce both ways,—your exports to the United States—your imports from them—either of them singly, being twice as great as your commerce with any other nation. And yet, what think you it amounts to?—*About as much as the value of the annual crop of oats and beans in Great Britain!*"

In reference to the universal interest that was felt in the subject which brought the meeting together, he said it seemed to him there was "an amount of science, of mechanical skill, of practical sagacity, of capital, and of attention on the part of the higher orders—of diligence and perseverance on the part of the intermediate and labouring classes, combined for the promotion of agriculture, that had never been equalled in the history of the world."

Now can any of us for a moment suppose that the result of this will be a failure, and that agriculture is to remain stationary? Verily, nay: every farmer who still slumbers, must wake up, and study his position with reference to his soil—his crops—his markets—his manures: and he who is determined not to do so, and has made up his mind to farm and to crop *thus* and *so*, because his father and his grandfather did it, and were successful, will by-and-bye, perhaps, be sufficiently aroused to perceive that his long slumber has left him *alone*—behind in the race in which all had embarked but himself.

We learn from the Belfast (Maine) Journal, that a violent shower of hail, accompanied with lightning, recently occurred in Freedom, and its immediate vicinity. Large quantities of window glass were broken. In one instance a house was struck, and much injured by the lightning; as was also the occupant, B. Douglass. Both boots were torn off his feet. "The lightning then entered the churn in which the family preserve their cream, and made butter of the cream in it, as effectually as an hour's churning would have done."

A million of persons are said to have passed through the Thames tunnel since it was opened, five months ago.

"CHEMISTRY, in its application to Agriculture and Physiology; by Justus Liebig, M. D., &c., &c.—Edited from the manuscript of the author, by Lyon Playfair."

James M Campbell & Co., of this city, and Saxton & Miles, of New York, have lately published a neat pamphlet edition of this work;—price 25 cents.

Having been originally prepared in the form of a Report on the present state of organic Chemistry, it was found, however valuable to the professional man, not sufficiently popular in its style and details, for such as have not made chemistry their particular study. The editor has endeavoured to make it so. The Introduction, of some 60 pages has been omitted, as has also most of the Appendix. Several valuable additions have been made, and while the original character of the work, as published a couple of years ago, has been retained, such changes have been introduced, as will make it a very interesting volume to the inquiring farmer, who has but little chemical knowledge. It may be had of Kimber & Sharpless, No. 50, N. Fourth street, as well as of the publishers.

Just as our number was ready for press, we received through the kindness of the publishers, James M. Campbell & Co., a copy of *Liebig's Animal Chemistry—or Organic Chemistry, in its applications to Physiology and Pathology.* This is a beautiful octavo edition, corresponding with that of the *Agricultural Chemistry.* We need not say any thing in commendation of this work. Its character is already well known and thoroughly established. Its remarkable cheapness—25 cts.—places it within the reach of every one.

We received at the same time, and from the same publishers, the eighth No. of *The Select Library of Religious Literature*, containing the conclusion of Llorente's History of the Inquisition. The other parts of this highly interesting work, we have not had an opportunity of looking over. The number also contains a commencement of the life of Theodore Agrippa D' Aubigné.

The great Annual Fair of the American Institute, of the city of New York, will open at Niblo's Garden, on the 10th of Tenth mo. next, at nine o'clock, A. M.

A friend in Charleston, S. C., wishes to know where pure Alderney cows may be obtained, and at what price. Will T., who wrote the article on page 378, of our last number, or some other person, be so kind as to afford us the requisite information.

SHORT ADVERTISEMENTS

The subject matter of which, may correspond with the agricultural character of this paper, will be inserted at the rate of one dollar for each insertion of ten lines or less; and so in proportion for each additional line. The money to be paid in advance.

The quantity of rain which fell in the 7th month (July) 1843, was a little more than four inches and a half. ..... 4.543 inches.

Penn. Hospital, 8th mo. 1st, 1843.

CONTENTS OF THIS NUMBER.

Fruit Trees ..... Page 9
Durham cattle—Milk gage 10
Product of Dairy cows—Breaking Steers—Bees 11
Making soap—Wholesome truths 12
King William Ag. Society—Professor Liebig. 13
Milk and Rail-roads—Potatoes 14
Blight-beetle 15
Canada thistle—To make good coffee 16
Colman's mission from the U. States—Martins 17
The Blackberry culture—Glass—Cutting potatoes 18
Instinct of birds 19
Soda, for washing 20
Sugar from maize 21
Poultry better than pork or beef—Cockroaches 22
Nantucket sheep-shearing—Feeding horses 23
Flour mill in Mississippi—Pea-bug 24
Remarks on sheep breeding 25
Manuring a science 27
Disease of the buttonwood 29
Agriculture—Explosion in a pork-house 30
Disease in peach trees—Hooks in the eyes 31
Raising water—Birds,—Eggs 32
Treatment of animals when young 33
Letter from H. Colman 34
Analyses of Indian corn and Ruta baga—Poultry yards 36
Peach trees—Editorial Notices 37

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